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Apparatus for freezing Quicksilver

TRAVELS

INTO

POLAND, RUSSIA, SWEDEN,

AND

DENMARK.

INTERSPERSED WITH HISTORICAL RELATIONS AND POLITICAL INQUIRIES.

ILLUSTRATED WITH CHARTS AND ENGRAVINGS.

By WILLIAM COXE, M. A. F. R. S.

Late Fellow of King's College, Cambridge;
Member of the Imperial Œconomical Society of St. Peterſburgh,
And of the Royal Society of Sciences at Copenhagen;
And Chaplain to his Grace the Duke of Marlborough.

VOLUME THE FIFTH.

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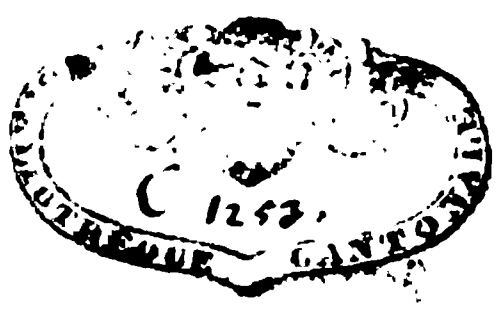

TO

SAMUEL WHITBREAD,
ESQ. JUN. M. P.

THIS FIFTH VOLUME

OF

TRAVELS INTO POLAND,
RUSSIA, SWEDEN,
AND
DENMARK,

IS INSCRIBED,

AS A TESTIMONY OF ESTEEM AND FRIENDSHIP,

BY

THE AUTHOR.

ADVERTISEMENT

TO THE

FIFTH VOLUME.

IN this additional Volume, the Author ſubmits to the Public a continuation of thoſe obſervations, which a ſecond journey into the northern kingdoms of Europe has enabled him to make; and more particularly an account of thoſe countries which he did not viſit in his former tour; namely, Jutland, Norway, Livonia, Courland, and Pruſſia.

BEMERTON,
NOVEMBER 2, 1790.

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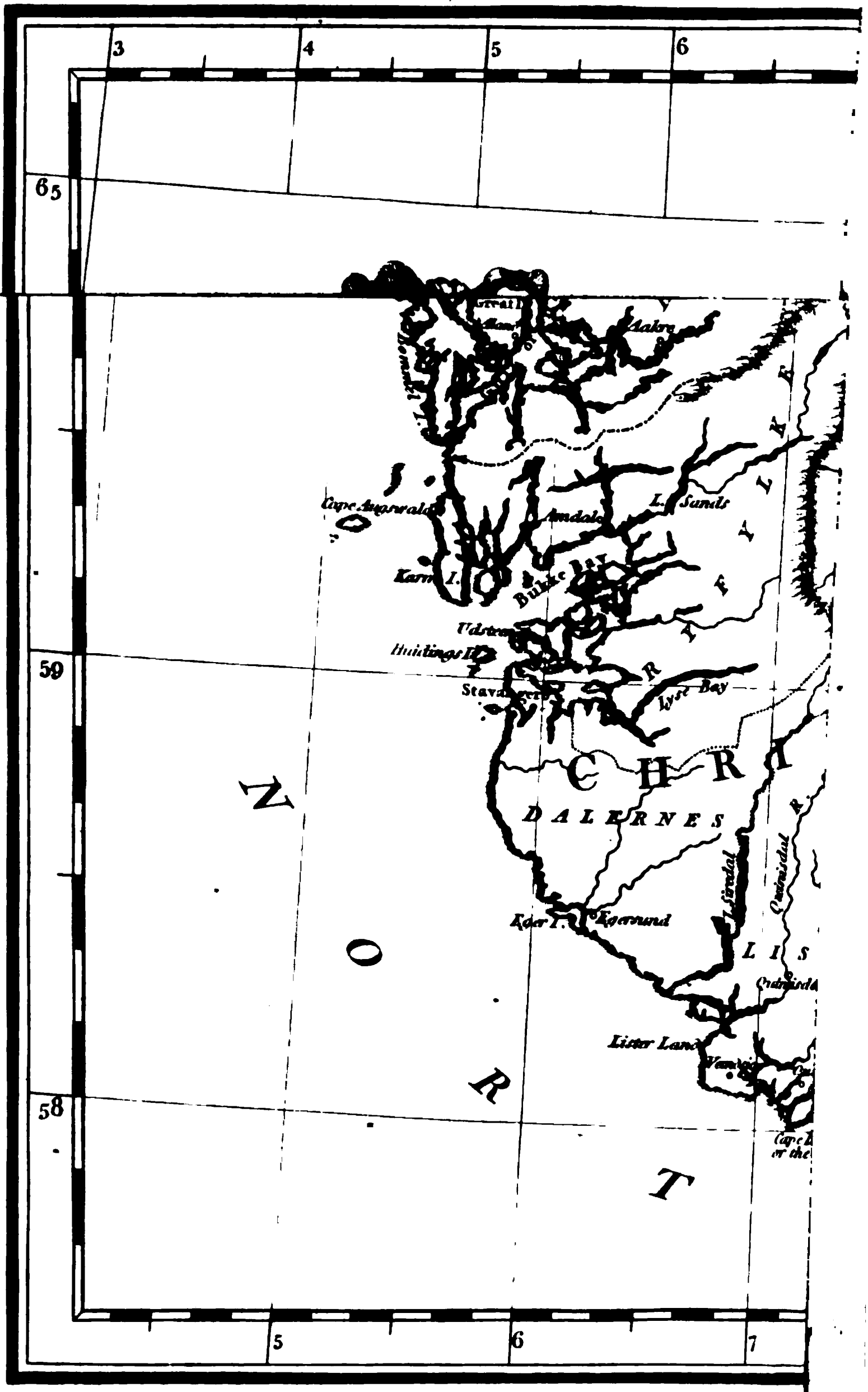
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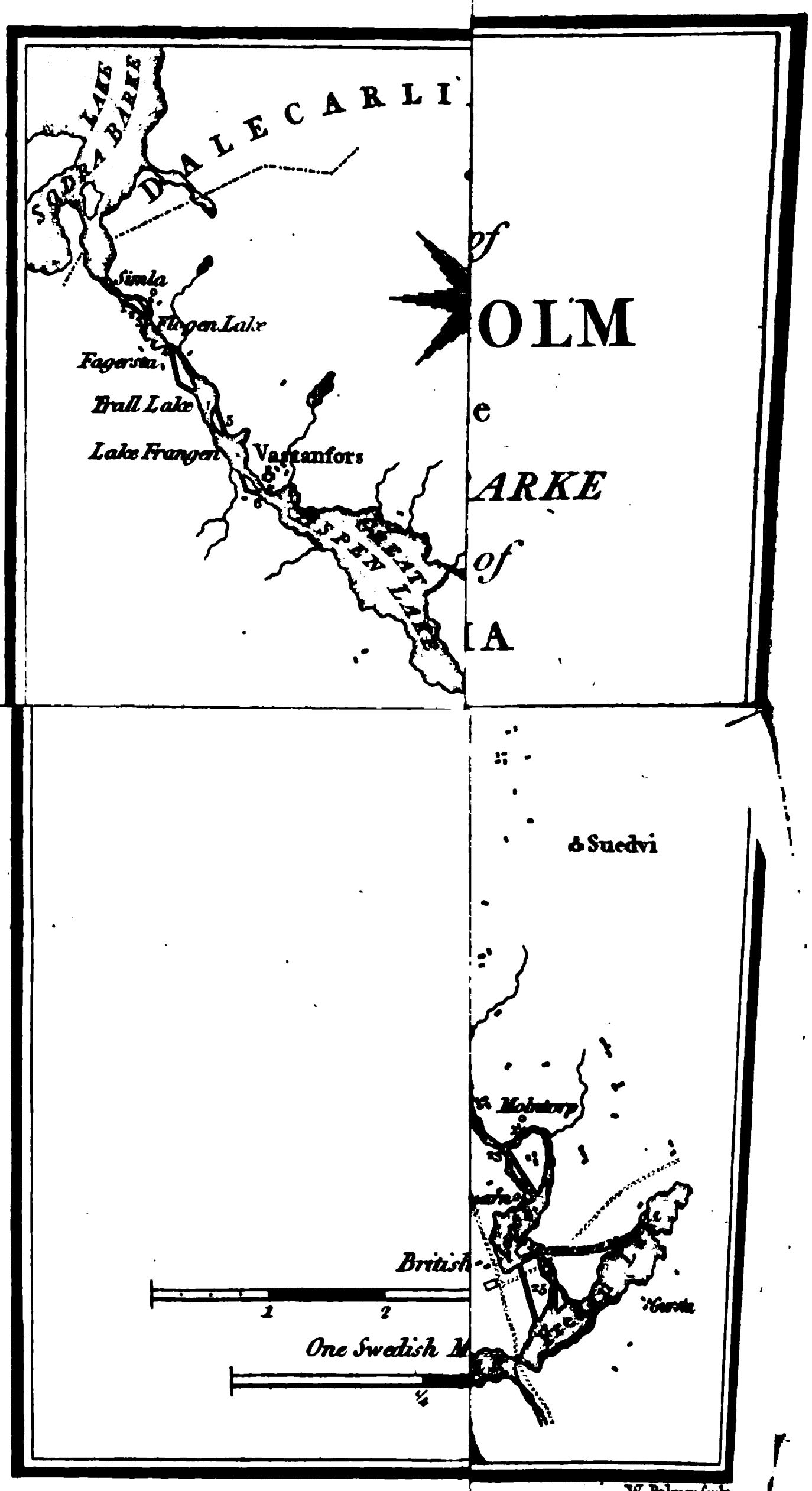
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TRAVELS
INTO
DENMARK.

BOOK IX.

CHAP. I.

Journey from Hamburgh to Lubec—Travemunde—Eutin—Kiel—Sleſwic—Mauſoleum of Frederic the Firſt—Angeln—Flendſburg—Colding—Horſens—Remaining Family of Prince Ivan.

JULY 9, 1784. In our way to Denmark we quitted Hamburgh, and ſoon entered Daniſh Holſtein, ſeparated from the dutchy of Saxe Lauenburgh by the ſmall rivulet Bilde; and as the roads were for the

moſt part very heavy and ſandy, we did not arrive until ten in the evening at Hamfelde, a ſmall village in the dutchy of Lauenburgh. We paſſed the night in a cottage ſimilar to thoſe in Weſtphalia, being a large barn into which our carriage drove: at the lower end were cows, pigs, and ſheep, and our horſes chained to their racks; a little higher were the beds for the family, ranged in kinds of cupboards in the walls, about four or five feet from the ground; at the upper end were three rooms, a kitchen without a chimney, a ſitting room, and a bed-chamber juſt large enough to contain two beds; and the landlady was much ſurpriſed that we inſiſted upon both beds, aſſerting that one was ſufficient for two gentlemen. On her putting on a pair of ſheets which did not ſeem clean, I gently remonſtrated; as an apology, the good woman aſſured me that they were perfectly clean, no one having ſlept in them but her huſband, who was as wholeſome as an emperor. Unwilling to affront the good woman in the perſon

of

of her huſband, I acquieſced; but took them off when I went to bed, and paſſed the night in my clothes.

The next morning we continued our route to Moellen, though not the neareſt way to Lubec, in order to examine the navigation of the Steiknitz, which unites the Elbe and the Trave. This water-communication is formed by the two ſmall rivulets, the Steiknitz and the Devenau, the former of which falls into the Trave, and the latter into the Elbe at Lauenburgh. Profeſſor Bueſch of Hamburgh informed me, that they were united by a canal, cut by order of the government of Lubec, in the fourteenth century; and ſuppoſed to have been the firſt canal which had double ſluice-gates. The average depth of water being only three feet and a half, no heavy-laden veſſels can paſs along. The watermen belonging to ſome barges carrying corn and planks told me, that they had employed eight days in coming from Lubec to Moellen, which is only thirty-ſix miles by land; and did not expect to reach Lauen-

burgh in leſs than eight days more. Seventeen locks muſt be paſſed by all veſſels going from Lubec into the Elbe at Lauenburgh; yet, notwithſtanding this inconvenience, about 440 veſſels annually navigate this canal. The country around Moellen is agreeably diverſified with fine woods of oak, beech, and birch.

Ratzeburgh is a ſmall fortified town, prettily ſituated on an iſland in the midſt of a lake about thirty miles in circumference; the banks whereof are abrupt, and pleaſantly feathered with wood. The town partly belongs to the dutchy of Mecklenburgh Strelitz, and partly to that of Saxe Lauenburgh. The buildings are of brick, and almoſt every houſe is ſhaded with a tree, which forms a ſingular and agreeable appearance.

From the lake of Ratzeburgh iſſues the river Wakenitz, which joins the Trave near Lubec, and thus facilitates the water-communication between Lubec and theſe parts.

The dutchy of Saxe Lauenburgh belongs

longs to the king of England, as elector of Hanover.

The road winds at a ſmall diſtance from the lake of Ratzeburgh, commanding diverſified views of wood, water, and fields of corn and paſture. We entered the territory of Lubec about the diſtance of three miles from that city, and paſſed over much ſand and barren heath, till we drove into its gate.

Lubec, the head of the Hanſeatic league, was formerly the moſt commercial city, and moſt powerful republic of the north. Her fleet ſet at defiance the northern powers, and rode miſtreſs of the Baltic. How are the mighty fallen! ſhe no longer retains a ſhadow of her former power, has loſt great part of her trade; and her commerce, conſiderably diminiſhed, will ſuffer ſtill more diminution, if the canal of Kiel ſhould anſwer the purpoſes for which it was planned: for by that means great part of the merchandize which now paſſes through this town will be conveyed along that canal down the Eyder to Tonningen,

and thence by ſea and up the Elbe to Hamburgh. In order to counteract theſe effects, profeſſor Bueſch has formed a plan to render the Steiknitz navigable for veſſels of burden as far as Lauenburgh. If this project ſhould be carried into execution, the advantages ariſing to the dutchy of Lauenburgh, as well as to the city of Lubec, are too evident to require an explanation.

The houſes of Lubec are built in a very ancient ſtile of architecture, the doors being ſo large as to admit carriages into the hall, which frequently ſerves for a coach-houſe. The walls of many houſes bear the date of the fifteenth century; and doubtleſs, at that period, the town was eſteemed extremely beautiful.

The quay of Lubec is on the river Trave, which falls into the ſea at the diſtance of fourteen miles. I obſerved about 120 merchant-ſhips deſtined to Ruſſia, Sweden, and Denmark. It admits veſſels from 150 to 200 tons burden, and ſometimes, but rarely, 300. The trade of Lubec is chiefly a trade

of

of commiſſion, drawing from Ruſſia, Sweden, and Denmark, their raw commodities, and ſupplying them with wines, ſilks, cloth, and ſteel ware.

Being unwilling to quit the territory of Lubec without viſiting Travemunde, we ſet off at five in the afternoon; and at ſeven reached Travemunde, diſtant from Lubec about nine miles. We found a very clean and comfortable inn, good accommodations, and a civil landlord who ſpoke Engliſh.

Travemunde, or the mouth of the Trave, ſo called from its ſituation on the point where that river falls into the Baltic, owes its exiſtence to its being the port where the veſſels deſtined to and from Lubec take their ſtation. We hired a boat, and rowed round the port to the road. The port is able to contain ſixty veſſels, and is ſufficiently deep to admit thoſe of 200 tons burden, the ſame as aſcend the Trave to Lubec. Men of war ride at anchor in the road. Our landlord procured from the pilot the following liſt of the merchant-ſhips

which took their departure from Travemunde in the following years.

In 1778, 941 ſhips; in 1779, 916; in 1780, 803; in 1781, 935; in 1782, 858; in 1783, 951. Of theſe our landlord conjectured, that 150 belonged to Lubec, that 300 were Daniſh, 250 Swediſh, 100 Pruſſian, 20 Dutch, and 10 Engliſh. Travemunde is defended (if it can be called defence) by a ſmall fortreſs mounting forty guns, and containing a garriſon of 50 men.

June 12th. We continued our route for ſome miles along the ſands of the Baltic, to Haffkrog, a village in Daniſh Holſtein, about five miles from Lubec. A little farther we came to Suſſelen, a village in the dominions of the prince biſhop of Lubec; and ſoon afterwards reached Eutin, a town with a palace, in which he uſually reſides; and from which he alſo aſſumes the title of the prince of Eutin.

The preſent prince is brother to Adolphus Frederic, late king of Sweden: it is, like Oſnabrug, a ſecular biſhoprick.

The

The palace is a large brick building on the banks of a lake, and contains nothing worthy of the leaſt obſervation, except a few indifferent family pictures, amongſt which I remarked one of the duke of Anhalt, remarkable as being the father of the fortunate Catherine the Second, empreſs of Ruſſia; and another of Charles duke of Holſtein, father of the unfortunate Peter the Third.

The grounds are laid out in ſtrait walks, with cut hedges, ſtagnated canals, and *jets d'eau*, with an intermediate plot of ground called an Engliſh garden; conſiſting chiefly of zig-zag walks, which, according to the opinion of moſt foreigners, are ridiculouſly ſuppoſed to form the peculiar excellence of our ſtyle.

The environs of Eutin are moſt delightful; and the road from thence to Ploen, and ſtill farther to Kiel, runs through a fertile country, through fields of corn and paſture, encloſed with "hedge-row elms and coppice green," and beautifully interſperſed with groves of oak and beech.

I again

I again examined the canal of Kiel, which was begun in 1777, and of which I have given a plan and deſcription in the former account of my travels*. It is now almoſt finiſhed, and will probably be opened for navigation in the ſpace of three or four years. The whole expence will not amount to £.800,000. An expence by no means to be regretted, if the inland navigation between the two ſeas can be eſtabliſhed on a permanent footing.

The project of thoſe who planned this canal was no leſs than to draw by Kiel into the Baltic the commerce of Bremen, Hanover, and Weſtphalia, which is now carried down the Veſer and by Gluckſtadt upon the Elbe to Hamburgh and Lubec, and to facilitate the tranſport of merchandize from Holland and the north ſea to the ports of the Baltic. But the principal impediment to the ſucceſs of this canal ſeems to ariſe from the difficult navigation of the Eyder between Rendſburgh and Tonningen,

* Book VIII. C. v.

ningen, on account of the numerous ſhoals occaſioned by the ſhifting ſands, which not unfrequently render the entrance into the Eyder impracticable, and always prevent any veſſels from paſſing which draw more than nine feet of water. Few ſhips therefore which navigate the Baltic will unload their goods at Kiel, in order to embark them in ſmaller veſſels to Tonningen, where the merchandize muſt be again reimbarked. Ships ſailing from the Baltic to any of the Engliſh or French ports will doubtleſs prefer the navigation round the Cattegate, with all its dangers and difficulties. Thoſe which are deſtined for Hamburgh, or the adjacent parts, will chooſe perhaps the ſhorter and more ſecure paſſage of the canal. But it is much to be doubted, whether the commerce between Hamburgh and the north will be ſufficient to anſwer the expences of its conſtruction. The trade of Kiel at all events will be greatly increaſed by this canal; but the principal depoſitory of the merchandize will be at Rendſburgh.

The church of Sleſwic contains the ſepulchre

pulchre of Frederic the Firſt, ſon of Chriſtian the Firſt. The tomb is a ſarcophagus of dark-coloured marble, ſupported by ſix female figures ſtanding upon pedeſtals, and anſwering the purpoſe of columns. Theſe figures are, Charity, accompanied by two children, her uſual emblem; Fortitude, holding a broken column; Prudence, with the ſerpent; Juſtice, with her ſcales; Juriſprudence, with tablets; and Hope, with an anchor: their countenances are Greek, and uncommonly pleaſing, and the drapery truly elegant, after the faſhion of the antique. Towards the bottom of the ſarcophagus are four beautiful little angels or genii, with their torches reverſed, and above is placed the figure of the king in armour. At each end are the figures of two women, of the ſame ſize and elegance as thoſe which ſupport the ſarcophagus; one holds the royal coat of arms, the other an inſcription containing Latin verſes in praiſe of the deceaſed. All the figures are of the fineſt alabaſter, and were probably executed in Italy.

Frederic the Firſt, ſon of Chriſtian the

Firſt,

Firſt, received as his inheritance the duchy of Sleſwic, and the crown of Denmark on the depoſition of Chriſtian the Second. Seated on the throne by the univerſal ſenſe of the nation, he was eſtabliſhed in it rather by the zeal of his ſubjects, and by the co-operating aſſiſtance of Guſtavus Vaſa, his protector and rival, than by his own proweſs. He ſeems indeed to have inherited the mild and pacific virtues of his father Chriſtian the Firſt; virtues which would never have raiſed him to a throne, if the general odium had not conſpired to the depoſition of Chriſtian the Second. He died in 1533, aged 60 years.

Inſtead of proceeding from Sleſwic to Flendſburg by the neareſt way, along the high road, we made a pleaſant excurſion by Cappel, through that part of the duchy of Sleſwic called Angeln or Engel, from which doubtleſs is derived the native country of our Anglo-Saxon anceſtors, who invading and taking poſſeſſion of our iſland, formerly called Britain, converted its name into England or Engelland. The truth of this fact,

ſufficiently

ſufficiently authenticated by hiſtory, is ſtill further corroborated by the reſemblance which this fertile diſtrict of Angeln bears to our native iſland in the general appearance of the country.

Cappel is a ſmall but neat town upon the Sley, the ſame bay which reaches to Sleſwic. It contains about 550 inhabitants, who are induſtrious, and carry on ſome trade, exporting bacon, cheeſe, butter, eggs, and other commodities to Copenhagen, and ſupplying the interior parts of this province with coffee, ſugar, ſpices, and other foreign commodities. The environs of Cappel are quite delightful, being grounds gently riſing, ſprinkled with much wood, and commanding fine views of the bay.

The country which we traverſed from Cappel to Flendſburg was no leſs delightful; the gravel roads wind through green lanes, with quickſet hedges, through encloſed fields, and ſmall woods, reminding me ſo much of my native country, that I almoſt fancied I was paſſing through Engliſh lanes and Engliſh encloſures: the coun-

try is greatly diverſified with ſcattered farm-houſes and frequent villages.

We made this excurſion in an open cart; and, as the weather was fine, enjoyed a conſtant view of this delightful and cultivated diſtrict. The peaſant who drove us informed me, that the country yields all ſorts of grain and flax, and abounds in paſture; that the peaſants weave ſufficient linen and coarſe cloth for their own uſe, knit their worſted ſtockings, and make their boots and ſhoes. They procure hats and a better ſort of cloth from Flendſburg. Their food is chiefly rye-bread, cheeſe, eggs, milk, and occaſionally meat. They diſtil ſpirits from malt, and make cyder, which is their uſual drink.

Flendſburg carried on a conſiderable trade during the American war, and poſſeſſed 200 merchant veſſels, ſeveral of which ſailed to the Weſt Indies. Peace has reſtored the commerce to its old channels; many of the veſſels have been ſold, the traffic to the Weſt Indies has been conſiderably leſſened, and the chief trade of the town now centers in

the

the iſle of Zealand, the coaſts of Norway, and Sweden.

From Flendſburg we puſhed our travels into Jutland, not ſo much with a view to ſee the country, as from a deſire to pay our reſpects to the brothers and ſiſters of the unfortunate prince Ivan, who are now ſettled at Horſens, a town of Jutland, ſituated at the extremity of a bay of the Baltic, a few miles from the frontiers of Jutland.

Having paſſed through Haderſleven and Apenraad, we quitted the duchy of Sleſwic, croſſed the ſmall river Aue, which forms the boundary of that duchy, and arrived at Colding, the frontier town of Jutland, a ſmall town on the extremity of a bay of the Little Belt. The harbour is above two miles in circumference, and ſufficiently deep to admit ſhips of the largeſt burthen.

The royal palace is a large quadrangular building of brick ſtuccoed white: it contains a magnificent ſuite of 190 rooms of good ſize and proportions, which have not been furniſhed ſince the time of Frederic the Third. This palace, now untenanted

and out of repair, was formerly much viſited by the kings of Denmark, two of whom died in the chamber which is now called the prince royal's apartment; namely, Frederic the Second, and Chriſtian the Third. The apartment is hung with old tapeſtry, repreſenting the great Margaret hunting, who ſaid to have reſided here. A fine proſpect preſented itſelf from the windows of the caſtle, commanding the harbour, bounded by gentle hills diverſified with wood and paſture, and cloſed by a diſtant view of the iſle of Funen. A ſmall toll is paid for all cattle paſſing from Jutland into Holſtein. If I am rightly informed, about 200 horſes, 4000 oxen, and 10,000 ſwine are annually exported by this paſſage.

On our arrival at Horſens we waited upon the principal officer attendant on the Ruſſian princes, and requeſted to have the honour of being preſented to their highneſſes. We received a favourable anſwer; but when we expected that our requeſt would be complied with, we were put off with ſeveral excuſes; firſt, that one of the

princes was indiſpoſed; another time, that as they could ſcarcely ſpeak any language but the Ruſſian, they were embarraſſed with ſtrangers. We did not know, until we were informed by Mr. Guldberg, whom we had the honour of ſeeing at Aarhuus, that by ſpecial orders from the court of Denmark no foreigners are permitted to be preſented to them. When the empreſs had determined to ſet them at liberty, ſhe ſent a Livonian lady, who accompanied them from Kolmogori to Flatſtrand. They embarked at Archangel, and were three months at ſea in their paſſage to Berghen in Norway. The night after they landed at Flatſtrand on the coaſt of Jutland, they were received at Aalberg by Count Oſten, governor of that place, where they remained five days. From thence they proceeded by eaſy journies to Horſens. They were only accompanied by a Ruſſian lady, and a prieſt and his wife. From their ignorance of any language but the Ruſſian, and their inability to converſe with moſt of thoſe who were placed about them, on their firſt arrival at Horſens they appeared

appeared even to regret their priſon at Kolmogori. But they were ſoon reconciled, and became quite delighted with the change in their ſituation.

They are ſtill a kind of ſtate priſoners, though, in compariſon with their former ſituation, may be ſaid to enjoy perfect liberty. They never go out without attendants, and have not yet been permitted to viſit any family in the town. The gates of their houſe or palace, as it is now called, are carefully cloſed in winter at ten, and in ſummer at eleven. They amuſe themſelves with reading, playing at billiards, cards, riding, and walking. They walk much about the town, and in the environs, and drive out in carriages; the princes frequently ride, and particularly Alexey, who is very fond of that exerciſe, and is ſaid to be expert. They not unfrequently pay viſits in the country, and dine with the neighbouring families.

The names of theſe illuſtrious deſcendants of the imperial family of Ruſſia, are, Catharine, born July 26, 1741; Peter, born

March 31, 1745; Alexey, born March 7, 1746, of whom Anne died in childbed. This prince is ſince dead. Elizabeth, the youngeſt ſiſter, was a woman of high ſpirit and elegant manners. On being releaſed ſhe wrote a letter of thanks to the empreſs, ſo well expreſſed, as to excite admiration how ſhe could have obtained ſufficient inſtruction during her long confinement. Her father is ſaid to have inſtructed her; but ſhe likewiſe obtained conſiderable information from ſeveral officers who were her guards, and whom ſhe conciliated by her captivating manners. On her arrival at Horſens ſhe poſſeſſed portraits of her father and mother, and even contrived to procure a rouble of her brother Ivan, ſtruck in his ſhort reign. It is difficult to conjecture how ſhe could obtain a coin, the poſſeſſion of which was more than once puniſhed by the empreſs Elizabeth as high treaſon; and it is ſtill more difficult to imagine how ſhe could ſecrete it from the knowledge of her guards during her long impriſonment in Ruſſia. She alone, of her brothers and

ſiſters,

ſiſters, could ſpeak a little German, and ſerved as an interpreter between them and prince Ferdinand of Brunſwick, who came more than once to viſit his nephews and nieces. She is reported to have died of chagrin; but, as far I could collect, her death was occaſioned by a violent fever, which was ſoon attended with a delirium, and hurried her to the grave on the ſixteenh day of her illneſs.

But though we were unſucceſsful in our attempt to be preſented, we did not however quit Horſens without ſeeing their perſons; as on the day after our arrival there was a great fair, and many people were aſſembled in the market-place, the princes frequently appeared at the windows of their palace to look at them. The princeſs ſeemed pale and thin; the princes were about the middle ſize, fair complexioned, with ſtrong features, light hair, and expreſſive eyes.

As I beheld theſe auguſt deſcendants of the Tzar Ivan, I felt extreme ſatisfaction, in reflecting that they were enlarged from

the precincts of a Ruſſian priſon; and admired the humanity and magnanimity of Catharine the Second, who ventured to releaſe from a long confinement of more than forty years, perſons whoſe parents had died in priſon, whoſe brother had once filled the Ruſſian throne, and cloſed his unfortunate life by the hand of violence. The empreſs of Ruſſia allows them an annual ſalary of £. 5000 ſterling. In my former publication * I expreſſed my doubts whether Ivan had ever been confined at Kolmogori; but I can now aſſert, with as much certainty as the circumſtance will allow, that he was impriſoned there for ſeveral years, but ſeparately and unknown to the reſt of his family.

Prince Antony Ulric and his four children were confined in a houſe with a large court-yard, about an Engliſh mile in circumference, ſurrounded with high palliſadoes: within this precinct they were permitted to walk and ride without moleſta-

* Book V. c. ii.

tion,

tion, but were never ſuffered to paſs the limits bounded by the palliſadoes. They inſtantly perceived a great difference in their treatment from the moment of the preſent empreſs's acceſſion to the throne. They had a large ſuite of domeſtics, ſeveral horſes, and were ſerved off plate. They were inſtructed in reading and writing. Their father had for a long time been greatly afflicted with the gout, and for a year before his death was totally blind.

The country from Horſens to Aarhuus is moſtly open, fertile in corn and paſture, and occaſionally dotted with woods of ſmall beech and oak, in the midſt whereof were pleaſantly ſituated country houſes and noblemen's ſeats. The villages were very few; many farm-houſes were ſcattered in the fields; and the churches built of brick or ſtone, roofed with red tiles, ſtanding ſeparately, and at a diſtance from the villages, were picturesque objects.

Finding a packet-boat ready to ſail for the iſle of Zealand, and learning that the wind was fair, we contented ourſelves with

a curſory view of Aarhuus, which contains nothing remarkable, and inſtantly took our paſſage. We ſet ſail about nine in the evening; made during the night ſcarcely more than twelve miles; but in the morning a favourable breeze freſhening, we crouded ſail, and bore away expeditiouſly. We paſſed ſeveral ſmall iſlands, low and ſandy, and for the moſt part deſtitute of wood. Samſoe, the largeſt, is twelve miles in length. We coaſted its weſtern ſide. The ſouthern ſhore is ſomewhat woody. At a diſtance we deſcried the iſle of Funen; and at two landed at Calendborg, which lies in a bay, the ſureſt harbour in the iſle of Zealand.

The caſtle of Calendborg, in which the unfortunate Chriſtian the Second cloſed his days *, is merely a maſs of ruins. It was deſtroyed in 1658 by the Swedes, who recollected, that their king Albert had been confined there by Margaret his rival and conqueror. The next day we reached Copenhagen.

* See B. VIII. c. v.

CHAP.

CHAP. II.

Copenhagen — Palace — Libraries — Villa of Count Bernſdorf — Gratitude of his Peaſants for having obtained their Freedom — Remarks on the Slavery of the Daniſh Peaſants — Priſon of Struenſee — Account of the Execution of Struenſee and Brandt — Environs of Copenhagen.

THE royal palace is a very magnificent triangular building of hewn ſtone, the wings and ſtables of brick ſtuccoed. It was built by Chriſtian the Sixth in ſeven years, as the inſcription informed me, without laying a ſingle tax on the ſubject. The enormous expence may be in ſome meaſure eſtimated by its dimenſions. The front is 367 feet in length, the ſides 389, and the height 114. It has ſix ſtories, of which three are mezzonines. In the fourth ſtory are the grandeſt ſuite of apartments, both as to ſize

and

and decoration. The concert-room is 128 feet by 38. The *Ritter Saal*, or Knights Saloon, is remarkable for the grandeur and elegance of the proportions; it is 128 feet long, 62 broad, and 48 high. It is lighted by ſeveral cryſtal chandeliers, and many gilded urns placed upon the baluſtrades of a gallery.

Among numerous pictures of the kings and queens of Denmark, I was greatly ſtruck with a portrait of Chriſtian the Fourth on board of a ſhip engaged with the Swediſh fleet. In the middle of this engagement the king was ſtruck by a ſplinter torn from the maſt by a cannon-ball; two of his teeth were beat out, his ear torn, his right eye forced from the ſocket, and he was thrown upon the deck with great violence. His attendants, ſuppoſing him dead, were making bitter lamentations, when the king, ſuddenly recovering from the ſwoon, into which he had been thrown by the agony of pain, ſtarted up, bound his wounds with his handkerchief, and continued giving his orders with the greateſt compoſure, until the

Swediſh

Swediſh fleet retired. The painter has choſen the point of time in which the king, having recovered from his ſwoon and bound his wound, is exerting himſelf in the midſt of the action, and has happily ſucceeded in throwing great animation over the whole figure.

The royal ſtables are perhaps the moſt magnificent in Europe. The racks of one, which contains ſtalls for 48 horſes, are of copper, and the columns that ſupport the ſtalls are of brick ſtuccoed white. Another contains 148 ſtalls; and the racks and pillars which ſupport the roof and ſeparate the ſtalls are of Norwegian marble.

There are two libraries belonging to the king, a private and a public, both in the apartments of the palace. The private library contains about 20,000 volumes; the public 110,000, and about 7,000 manuſcripts. Among the latter are many Perſian and Arabic, brought from Arabia by Niebuhr. Among the manuſcripts of the claſſics, I obſerved a moſt beautiful Cicero's Rhetoric on vellum, and a no leſs beautiful

Virgil

Virgil on vellum, of the eleventh century, which has been collated by the learned Heyne of Gottingen for his excellent edition of that Roman poet.

This collection is extremely rich in Icelandic books, and in all publications relative to the antiquities and hiſtory of the three northern kingdoms. The art of typography muſt have been introduced late into Denmark, as the earlieſt book printed at Copenhagen is Skanſky Logh, or king Waldemar's Law of Scania, which bears the date of 1505. This library has been lately augmented with the numerous and valuable collection belonging to Count Thott, who died lately, and bequeathed it as an addition to the king's library.

- The library of Count Thott, probably the largeſt private collection in Europe, contains 110,000 books, and above 5,000 manuſcripts. It is as remarkable for the rarity, as for the number of the books, and is particularly rich in the palæographia, or early printed books, of which there are above 2,000 printed in the fifteenth century.

The

The catalogue of this curious and valuable collection will conſiſt of ſeveral volumes; of which two have been already publiſhed. The remaining volumes will be printed before 1792. The ſeventh volume, which compriſes a liſt of the early impreſſions and manuſcripts, will likewiſe give the early impreſſions and manuſcripts in the king's library.

Mr. Suhm's collection, though not ſo numerous as Count Thott's library, deſerves to be viſited by the lover of letters. It contained, in 1785, at leaſt 50,000 books, entirely collected by himſelf. It is extremely rich in hiſtorical and topographical publications in all languages, and particularly thoſe which relate to the antiquities and hiſtory of northern Europe, the favourite object of the learned proprietor's ſtudies and reſearches. He poſſeſſes alſo a fine collection of manuſcripts in the Greek and Oriental languages, and particularly thoſe which belonged to the celebrated Reiſkius, for the purchaſe of which he

beſtows

beſtows on the widow of that celebrated critic an annuity of £. 40.

The library of Mr. Suhm is open every morning from nine to eleven for the uſe and inſpection of the men of letters, and ſtudents of the univerſity.

Mr. de Suhm is juſtly conſidered one of the moſt learned men in Denmark, in regard to the hiſtory and antiquities of the north. He has already given to the public the following works on theſe ſubjects, much eſteemed for the profoundneſs and accuracy of his reſearches: 1. Upon the Origin of Nations in general. 2. Upon the Origin of the Northern Nations. 3. Concerning Odin, and the Mythology of the Northern Nations. 4. Upon the Emigrations of the Northern Nations, 2 vols. 5. Critical Hiſtory of Denmark, 2 vols. 6. Hiſtory of Denmark.

During our ſtay at Copenhagen, we experienced great civility and repeated inſtances of hoſpitality from the Daniſh nobility. Among others we had the honour

of

of dining ſeveral times with the prime miniſter Count Bernſdorf, at his villa, about four miles from Copenhagen. The houſe, built by the late count, ſtands in a delightful ſituation on a gentle riſe, ſloping towards the ſea, backed by a ridge of hills prettily wooded, and commanding a pleaſant view of the Sound, the coaſt of Sweden, Copenhagen, and the numerous veſſels ſailing to and from the capital.

In our way to the village we paſſed a column of Norwegian marble, erected to the memory of the late Count Bernſdorf by the peaſants of his eſtate, in gratitude for having received the gift of freedom from their beloved maſter. The pillar is ornamented with a wheat-ſheaf, a ſpade, and a pick-axe, the emblems of agriculture. It contains a Latin and Daniſh inſcription. I copied the former, and ſhall here inſert it as a memorial of the count's liberality, and of their gratitude:

Piis manibus Joh. Hartvici Erneſti, Comitis de Bernſtorff, qui arva diſcreta immunia hereditaria

taria largiendo induſtriam opes omnia impertit in exemplum poſteritati 1767. P. S. S. grati coloni 1783 *.

It is much to be regretted, that few perſons in Denmark have followed the example of Count Bernſdorf.

The ſlavery of the peaſants is part of the unfortunate remains of the feudal ſyſtem, which, however modified and changed in the other parts of the Daniſh conſtitution, ſtill leaves behind it that indelible mark of its former preponderancy and injuſtice. It is remarkable, that hitherto all the attempts to aboliſh it, which have ſucceeded in Sweden, Norway, and ſeveral parts of Germany, have contributed only to rivet ſtill more ſtrongly in Denmark a ſervitude, no leſs diſgraceful to the government, than prejudicial to the community. I enjoyed how-

* "To the affectionate memory of John Hartvic Erneſt, Count of Bernſtorff, who in 1767 rendered free his hereditary eſtates, and thereby imparted induſtry, wealth, and every bleſſing, as an example to poſterity. Erected by his grateful peaſants, 1783."

ever

war carrying 74 guns, and 600 men, lately fitted out, and going upon a cruize to the Baltic, with three other ſhips of the line. We embarked at the port, and were rowed in the captain's boat to the ſhip, where we found Count Molcke, and a large company, conſiſting of perſons of the firſt condition, aſſembled. From the captain's cabin we had a moſt delightful view of the town and dock-yard of Copenhagen; of the Daniſh navy laid up in two lines in the harbour; of ſeveral men of war and frigates lying at anchor near us in the road; of numerous veſſels ſailing and covering the ſurface of the ſea, which was curled by a gentle breeze; of the diſtant coaſts of Sweden, and the adjacent ſhores of Zealand, richly clothed with wood. Dinner was ſerved upon deck, under a canopy of ſails and pendants; and forty perſons ſat down to a moſt ſuperb and elegant repaſt. After drinking the healths of the king and royal family, each health accompanied with a ſalute of fifteen guns, admiral Molcke gave, in compliment to Mr. Elliott, the Engliſh envoy, who was preſent,

ſent, The navy of England; and Mr. Elliott in return gave, The navy of Denmark. Several Daniſh ſongs were ſung to the accompaniment of violins and tambours de baſque, which had a moſt pleaſing effect. Theſe ſongs related to naval engagements, and to the honour of the Daniſh marine; and the chorus was repeated by the company, and re-echoed by the whole ſhip's crew. Books containing the words of the ſongs were handed round the company, with the Daniſh on one ſide, and the Engliſh on the other. One ſong recorded the gallant behaviour of admiral Huitfield, who; in an engagement with the Swediſh fleet, finding his own ſhip on fire, inſtead of endeavouring to eſcape in the long-boat, grappled with two of the enemy's men of war, and blew them up with his own ſhip. Another ſong in honour of their favourite hero Chriſtian the Fourth, is as popular in Denmark as "Rule, Britannia, rule the Waves," in England. I recollect the following lines of a doggerel tranſlation in the beginning of the ſong:

King Chriſtian ſtood high near the maſt,
In clouds of ſmoke:
His ſhining ſword was working faſt,
Cleft brains and helmets firſt and laſt,
Then ſunk each Gothic hulk and maſt,
In clouds of ſmoke, &c.

In viſiting the citadel, I inquired for the cells in which Struenſee and Brandt were confined. The dungeon which ſerved as a priſon for Struenſee is on the ground-floor, fourteen feet long and twelve broad. The barrack bedſtead on which he lay is ſtill there, and the chain to which he was faſtened is riveted to the wall: it is only eight feet long. During his confinement he was treated with the greateſt inhumanity, and frequently deprived of the commoneſt neceſſaries: he was chained to the wall in ſuch a manner as ſcarcely to be able to turn himſelf; and occaſionally threatened with the torture, if he would not confeſs what his enemies dictated.

I viſited likewiſe the ſpot where Struenſee and Brandt were executed, on the

28th

28th of March 1772. The ſcaffold was conſtructed in the middle of Eaſt field, near the eaſt gate of the town; and they were conducted to the ſpot in two ſeparate carriages, through an immenſe concourſe of people, aſſembled to ſee the execution. They arrived at the place of execution about eleven. Brandt firſt alighted, and mounted the ſcaffold with a ſlow ſtep and undaunted mien. He heard his ſentence read, and ſaw his coat of arms torn, without expreſſing the leaſt emotion. He then prayed for a few minutes, and ſpoke a few words to the people. When the executioner approached to aſſiſt him, he ſaid to him with firmneſs, yet not without mildneſs, "Stand off, and "do not preſume to touch me." Without any aſſiſtance he pulled off his peliſſe, and prepared for his fate. He firſt ſtretched out his hand, and bade the executioner do his duty, without ſhrinking from the blow: it was ſtruck off, and his head was ſevered from his body almoſt in the ſame inſtant. His body was then quartered.

During this dreadful ſcene Struenſee was

at the bottom of the ſcaffold, anxiouſly expecting and dreading his own fate. His whole frame trembled when he ſaw Brandt's blood guſhing from the ſcaffold; and he was ſo agitated, that he could not walk up the ſteps without help. He ſaid nothing, and permitted the executioner to aſſiſt him in taking off his cloak. Inſtead of imitating the courage and ſerenity of his fellow ſufferer, he ſtarted up ſeveral times from the block, before he could prevail upon himſelf to give the ſignal, drew back his hand, and was ſhockingly maimed before it was cut off, and was at laſt held down by force while the executioner beheaded him.

The environs of Copenhagen are exceedingly beautiful. The country is gently undulating, produces much corn and paſture, and is finely interſperſed with ſmall foreſts of beech and oak. The ſea views are uncommonly enchanting, and the villas and country ſeats delightfully ſituated on the ſhores of the Sound.

The royal park, about four miles from the capital, is perhaps the fineſt ſpot for the

the natural beauty of the gently waving grounds, and the richneſs of the wood; and ſufficiently proves, that the nobles might lay out their grounds equal to ours in England, if they would truſt more to nature and leſs to art.

In the midſt of the park St. Helen's ſpring is a favourite ſpot, to which the nobility and gentry, and the lower claſs of people, reſort in the month of July, as to a kind of fair. Many tents and booths are erected for the reception of the company. Sometimes the royal family make their appearance. The common people eſteem themſelves very unfortunate, if they do not taſte the waters of the ſpring every year. The weather being very fine, and the ſeaſon quite delightful, we roved with pleaſure about the woods, enjoying the beauties of unadulterated nature, and walked to the hermitage, a building ſtanding in the moſt elevated part, and commanding a moſt extenſive view over the Baltic, the iſle of Huen, and the coaſt of Sweden.

The following table will give a more ex-

act notion of the revenues and expence of Denmark, in time of peace, than I was able to furniſh in my former volumes.

Daniſh Revenues.

	£.
Land-tax - -	800,000
* Sound duties - - -	100,000
Poll tax and other taxes -	300,000
† Extraordinary contributions	200,000
	£. 1,400,000

Daniſh

* The importance of the Sound duties to the government of Denmark, may be inferred from the number of veſſels which paſſed the Sound in 1782.

Engliſh - - -	1264	From Dantzic - -	328
Daniſh - - -	1634	Lubec - - - -	112
Swediſh - - -	2121	Bremen - - -	240
Ruſſian - - -	158	Hamburgh - - -	50
Dutch - - -	16	Roſtock - - -	89
Portugueſe - -	38	Venice - - -	3
Pruſſian - - -	1907	Auſtrian Netherlands	505
			8465

† Among the extraordinary contributions is the tax on honours and rank, laid in the following proportion:— Perſons of the firſt rank pay annually 80 rix-dollars, or

Daniſh Expenditure.

Civil liſt - - -	£. 400,900
Army - - -	400,000
Navy - - -	200,000
Payment of debts - -	200,000
Penſions - -	160,000
Jointure of the queen-dowager	16,000
Income of prince Frederic -	8,000
	£. 1,384,000

The public debt in 1785 amounted to £. 3,600,900, of which in time of peace about £. 200,000 is annually liquidated. Lately however this liquidation of the debt owing to the ſubjects has been made in

or 16 *l.*; of the ſecond 14 *l.*; of the third 8 *l.*; fourth 6 *l.*; fifth 3 *l.* 4 *s.*; ſixth 3 *l.*; ſeventh 2 *l.* 8 *s.* eighth 1 *l.* 12 *s.*; and ninth 1 *l.* 4 *s.* All the places and penſions are rated in the following proportion:—Penſions not leſs than 400 rix-dollars or 80 *l.* and upwards, pay 10 per cent.; from 70 *l.* to 80 *l.* 8 per cent.; from 60 *l.* to 70 *l.* 7 per cent.; from 50 *l.* to 60 *l.* 5 per cent.; from 40 *l.* to 50 *l.* 4 per cent.; from 30 *l.* to 40 *l.* 3 per cent.; and from 20 *l.* to 30 *l.* 2 per cent.

bank

bank notes. Although this meaſure ſaves to the nation the payment of the intereſt of 4 per cent. in money, yet it too much promotes the increaſe of paper currency. The bank notes are not exchanged at Hamburgh, except under a diſcount from 16 to 20 per cent. There is but little ſpecie in the country. The ſpecie collected for the Sound duties is chiefly appropriated to the intereſt of the foreign debt, and the appointments of perſons employed in Holſtein; and the produce of the ſilver mines at Kongſberg ſcarcely exceeds £. 50,000 per annum.

CHAP.

CHAP. III.

Preſentation to the Prince Royal—Revolution in the Adminiſtration effected by his Royal Highneſs—Account of that Tranſaction.

IN a private audience of the prince royal, I had the honour of preſenting my Travels in Poland, Ruſſia, Sweden, and Denmark. His royal highneſs converſed with me for a conſiderable time; and, by the queſtions he put to me, and the remarks which he made, gave ſtrong ſigns of a comprehenſive mind, and of a diſpoſition formed for government. I could not avoid admiring a prince, who at the age of ſixteen acted with ſo much firmneſs, ſecrecy, and diſcretion; and who lately effected a change in the governing adminiſtration of this kingdom, no leſs by his own prudence and courage, than by the advice and aſſiſtance of his friends.

Since

Since the impriſonment and exile of Matilda, the whole power was veſted in the queen-dowager Louiſa Maria; and the adminiſtration, which oſtenſibly carried on the public affairs, was entirely ſubſervient to her views, and to thoſe of her ſon prince Frederic.

The late king of Pruſſia had, by means of his couſin the queen-dowager, gradually acquired an almoſt abſolute ſway in the cabinet of Denmark; and directed the foreign affairs in ſubſerviency to the views of the French court, and in oppoſition to the intereſts of England. Count Bernſdorf, prime miniſter, being the only perſon in the Daniſh miniſtry who ventured in any degree to oppoſe the French and Pruſſian party, his diſmiſſion was reſolved in the cabinets of Verſailles and Berlin; and his conduct, with regard to the armed neutrality, furniſhed an opportunity to effect their purpoſe.

The king of Pruſſia having prevailed upon the reigning party to accede to the armed neutrality, a meaſure ſo hoſtile to the

intereſts of England, Count Bernſdorf, though he could not prevent the meaſure, had yet ſufficient addreſs to inſert an article in the treaty, that Denmark ſhould maintain its former alliances.

This conduct gave great diſguſt to the king of Pruſſia; and prince Ferdinand of Brunſwic was ſent to offer Bernſdorf, that he ſhould be continued in the office of prime miniſter, if he would agree to the armed neutrality without the aforeſaid ſtipulation; and to threaten him with inſtant diſmiſſion, if he perſevered in that point. Bernſdorf, nobly diſdaining to hold his office on ſuch precarious and diſhonourable terms, was diſmiſſed from his employments, and retired into Germany; and his removal gave full and unlimited ſcope to the Pruſſian party, which governed the queen-dowager.

Mr. Guldberg, formerly profeſſor of the academy of Soroe, and preceptor to prince Frederic, was the perſon in whom the queen-dowager confided, and in the capacity of private ſecretary to the king was the ſecret, though not the oſtenſible miniſter.

A change

A change was alſo introduced in the uſual mode of iſſuing the royal mandates, which ſecured to the queen-dowager and her party the moſt abſolute ſway.

Previous to this change, the general affairs of government were tranſacted in the privy council, conſiſting of as many members as the king choſe to appoint; all particular buſineſs was carried through the different boards of finance, marine, and commerce, and the king always ſigned the decrees and edicts ſeparately in each board.

In order to extend their influence and authority, the reigning party introduced a kind of private cabinet, in which the king iſſued his orders ſolely from himſelf, and excluſively of the ſeveral boards. By this means the privy council became little more than a cypher; the reſpective boards were only employed in fulfilling the king's orders; and, as the king himſelf was incapable, the party, having poſſeſſion of his perſon, could obtain his ſignature on all occaſions, and was, in effect, ſovereign without controul.

Nothing

Nothing could alter this ſtate of affairs, but the admiſſion of the prince into the privy council; and as, according to the laws of Denmark, he could not be ſworn a member of that council until he had been confirmed and taken the ſacrament; and as, in order to be confirmed, he was to undergo a public examination, the governing party contrived to delay that ceremony, under the pretence that he was not ſufficiently inſtructed in the duties of religion. Reports were induſtriouſly circulated, and as readily believed, by thoſe whoſe intereſt it was to believe them, that the prince's abilities were extremely moderate. And, although it was uſual for the prince royal of Denmark to be confirmed, and take his ſeat in the privy council, at thirteen, yet this ceremony was repeatedly poſtponed long after the prince had reached that age, under a notion that he was incapable of undergoing a public examination.

But when the prince had nearly attained his ſixteenth year, they could not venture to delay his confirmation any longer. As

the

the fatal hour approached, every precaution, which prudence or art could ſuggeſt, was taken to gain the prince, and to continue the power in the ſame hands in which it had been ſo long veſted. For this purpoſe his governor, general Eikſted, who was not beloved by his royal pupil, was diſmiſſed; and Sporen, his preceptor, and ſuppoſed to be his favourite, appointed ſecretary of the cabinet. A new privy council was nominated, conſiſting almoſt entirely of the queen-dowager's creatures, in which Mr. Guldberg had the principal ſway.

Every thing ſeemed to bend before her, when the prince effected a revolution in the adminiſtration of Denmark, as ſingular as it was unexpected.

On the 4th of April 1784, the prince was confirmed in the royal chapel of Copenhagen, in the preſence of the king and court. According to the cuſtom of the Lutheran church, he underwent a previous examination by the king's chaplain. The examination continued above an hour; and the prince, as I have been aſſured by many perſons

was now called to a reſponſible office, and was anxious to adviſe his majeſty to the utmoſt of his abilities. He then remonſtrated with great force againſt many abuſes in the late adminiſtration of affairs, particularly on the irregular mode of iſſuing orders from the cabinet, and not from the different boards of government. He continued, that, conſcious of his own inexperience, he could not adviſe his majeſty to any effect, to the glory of the crown, or the advantage of the nation, unleſs the privy council conſiſted of thoſe perſons who poſſeſſed his confidence, and the confidence of the people. That, in the preſent inſtance, neither himſelf or the nation could place any confidence in the perſons then in power; he therefore requeſted the king to diſſolve the preſent privy council, and to appoint in their place count Bernſdorf, and ſuch other perſons whom he took the liberty of recommending. He hoped alſo, and he truſted, that his majeſty would alſo iſſue an order, that no edict ſhould be valid, unleſs it was ſigned by the king, and counterſigned

by himſelf. At the concluſion of theſe words, which he uttered with great firmneſs and moderation, he laid the appointment of the new privy council before his majeſty, intreating him to ſign it.

The members (except baron Schach Rathlow, who alone was acquainted with the prince's determination) were ſo petrified with aſtoniſhment, as to be incapable of making any reſiſtance. But when the king appeared intimidated and heſitating, one of the members roſe, and ſaid, "Sir, his ma-"jeſty cannot ſign ſuch papers without due "conſideration," and endeavoured at the ſame time to ſnatch them from the prince's hand. The latter replied with ſome heat, but with great firmneſs and dignity, "Sir, it is not "your buſineſs to adviſe his majeſty on "ſuch occaſions, but mine, who am heir "apparent, and am reſponſible to the na-"tion for my conduct;" and again tendering the papers to the king, his majeſty ſigned them inſtantly. The papers were ſent by a confidential meſſenger to the chancery, and regiſtered accordingly.

The privy council being thus diſſolved on the firſt time of their aſſembling in the king's preſence, the prince himſelf announced the change to the queen-dowager in terms of the higheſt reſpect.

Throughout the whole tranſaction, the conduct of the young prince was remarkable for a diſcretion and ſecrecy extremely uncommon in a perſon of his age. Being diſcontented with the queen-dowager, he had firſt entered into a ſecret correſpondence with count Bernſdorf, when he was ſcarcely more than fourteen years of age; and had continued it near two years, ſometimes by letters, and ſometimes by meſſages, and received from him inſtructions in what manner he ſhould proceed. While engaged in this buſineſs, he entered into another correſpondence with M. Schach Rathlow, who had the principal ſhare in procuring the diſmiſſion of count Bernſdorf, but was now diſpleaſed with the perſons in power, and made private offers to the prince without being acquainted with his ſecret correſpondence with Bernſdorf. The prince carried

carried on this double intrigue under the direction of count Bernſdorf, in whom he implicitly confided, without being ſuſpected by his preceptor Sporen, or by his governor, general Eikſted, ſo hackneyed in the intrigues of courts, and even lulled the ſuſpicions of the queen-dowager: for her majeſty, in a converſation which ſhe held with him about a week before the event, taxed him with holding a ſecret correſpondence unknown to her; to which he returned an evaſive anſwer with ſuch unconcern and ſerenity, that he entirely removed her ſuſpicions.

Thus a boy not ſixteen years of age duped veterans in court intrigues, by pretending to be entirely friendly to the queen-dowager's party, and to acquieſce in the nomination of the new privy council, at the moment he was determined to remove them.

It adds to the wonder of the tranſaction, that the project was entruſted to above ten perſons, and that not one of them

betrayed the ſmalleſt ſymptoms which could create ſuſpicion.

Every meaſure which prudence dictated was adopted on this important occaſion. General Hut had aſſembled the guards in order to force the privy council to compliance, if the members ſhould make any oppoſition; and the governor of the citadel was prepared to admit the prince within the fortreſs, if affairs had not turned out to his wiſhes. Fortunately the courage and addreſs of the prince, and the popularity of his cauſe, rendered theſe precautions unneceſſary.

The prince treated with great mildneſs all thoſe perſons whom he removed from their places. He conferred on the ex-miniſter Guldberg a penſion of * 5000 rix-dollars, and appointed him governor of Aarhus, a ſpecies of honourable baniſhment. He nominated Steman governor of Haderſleben; at the ſame time aſſured him, that he was convinced of the fidelity with

* 1900 *l.*

which

which he had diſcharged his office of treaſurer; adding, that if he could not ſufficiently reward him, he would amply provide for his children.

The principal perſons who acted as the prince's confidants, and who have ſince filled the principal offices in court and ſtate, were, M. de Schach Ratlow, Count Bernſdorf, Count Shimmelman, General Hut, and M. de Bulow, then gentleman of bed-chamber, and now marſhal of the prince's court.

The only foreigner who is ſuppoſed to have had any knowledge of the tranſaction, was Mr. Elliot, who had left Berlin to come to Copenhagen in the capacity of Britiſh envoy; and the king of Great Britain was the firſt ſovereign to whom the prince royal communicated his ſucceſs.

CHAP. IV.

Excurſion to Hirſholm, Fredericſborg, Friedenſberg, and Fredericſwerk.

THE ſhortneſs of my ſtay at Copenhagen during my firſt tour, and the earlineſs of the ſeaſon, prevented me from making any excurſions in the environs of Copenhagen. My ſecond tour in 1784, afforded me an opportunity of gratifying my curioſity: an agreeable expedition to the palaces of Hirſholm, Fredericſborg, and Friedenſberg, and to the iron founderies of Fredericſwerk, will form the ſubject of the preſent chapter.

Hirſholm, a royal palace begun by Chriſtian the Sixth, and finiſhed by his queen Chriſtina Sophia, is a large quadrangular building of brick ſtuccoed white, ſurrounded by a moat, and placed in a very low and marſhy ſituation. The ſuite of apartments

is

is princely, but almoſt totally without furniture, as they have not been inhabited ſince the impriſonment and exile of queen Matilda, who made it her favourite reſidence. The dining-room is a very large apartment, and remarkable for a *jet d'eau*, and twelve fountains, which ſpouted from the ſides. The gardens are formal, and full of *jets d'eau*. The place is ſo entirely neglected, that the court-yard is covered with weeds, and the moat is a green mantled pool.

Orders were lately received to put the palace in repair for the reſidence of the prince royal, who in all things ſeems to ſhow an affectionate attachment to the memory of his mother.

In the gardens is a ſummer-houſe, which uſed to ſerve as a temporary theatre for the diverſion of queen Matilda, and her company; and in another part is a wooden building called a Norway-houſe, containing landſcapes of Norway in relief, and imitations of rocks, with wooden cottages perched on them, and wooden roads. Near this building the walks are not unpleaſantly carried

sied through the grounds in the English ſtyle of gardens.

The road from Hirſholm to Frederic ſborg winds agreeably, through a very beautiful and undulating country, richly clothed with foreſts of beech, birch, and oak, and enlivened by ſmall lakes in the receſſes of the wood.

Frederic ſborg was built by Chriſtian the Fourth, and was ſo called in honour of his father Frederic the Second. It is an enormous and motley maſs of building, partly of red brick, and partly of ſtone, partly Gothic, and partly in the Grecian ſtyle of architecture. It is built round three courts, each of which is ſurrounded by moats, and joined by bridges. The principal façade is full of niches, containing bad ſtatues. In the inner court are two ſtories of ſeven arcades, conſtructed with ſtone painted black, and pillars of dark Norwegian marble. This appendage contraſting with the red brick preſents a moſt ſtrange effect, while a profuſion of gilding and maſſy ſculpture diſfigures rather than adorns the building.

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The ſituation of this pile, on the banks of a ſmall lake, is not unpleaſant. The palace contains a large collection of pictures, in great confuſion, among which I obſerved a few not unworthy of notice. The Crucifixion of our Saviour, by Andreas Peters, a Daniſh painter, in the reign of Chriſtian the Fourth. The three following were brought from Italy, by Frederic the Fourth: Saul and David, after the death of Goliah, by an unknown hand; Abraham and Melchiſedec, by Caravaggio, diſplaying the ſtrong contraſt of light and ſhade, and that vulgar nature, which characteriſes the works of that capricious painter; Jonas preaching to the Ninevites, by Salvator Roſa, the figures as big as life, and in the fineſt ſtyle of that great maſter; ſeveral tolerable paintings of the Flemiſh ſchool, chiefly ſcriptural hiſtories.

One of the apartments contains a ſuite of the imaginary portraits of the kings of Denmark, before the converſion of the Danes to the chriſtian religion. In another room, I obſerved the whole length figures of the

kings

kings of Denmark of the houſe of Oldenburgh, beginning with Chriſtian the Firſt, and ending with Chriſtian the Fifth, all originals. Of theſe the portrait of Chriſtian the Second is the moſt ſtriking, as it exhibits a fine expreſſion of that melancholy, ſeverity, and cruelty, which formed ſo large a part in the character of that deteſtable tyrant. A head of his queen Iſabella, ſiſter of the emperor Charles the Fifth, reminded me of her mild and amiable qualities; of the meekneſs and patience, and yet dignity, with which ſhe ſupported the harſhneſs and infidelities of her obdurate huſband in the time of his proſperity; of the extreme attachment which ſhe ſhewed to him in the hour of his diſgrace; of her unwearied attentions to ſoothe his diſappointment, and to rouſe him from his deſpondency; of her refuſal to accept a very honourable and advantageous ſettlement offered by the ſtates of Denmark; and of her noble anſwer, "That ſhe had rather live with her huſband in baniſhment, than reign without him *." She ſur-

* Mallet, Hiſt. des Dan. vol. ii. p. 277, 4to.

vived

vived his depoſition only three years, and died in the palace of Ghent, in 1526. Anne of Denmark, ſiſter of Chriſtian the Fourth, and queen of James the Firſt. Several of Charles the Firſt, one in his princely robes, when a boy about fifteen; and another by Vandyke, when he was a young man.

The chapel is a very handſome apartment, but more remarkable for its coſtlineſs than for its taſte. The walls are hung with the eſcutcheons of the knights of the Elephant, the firſt order in Denmark; as thoſe of the gallery are with the eſcutcheons of the knights of the order of Danebrog.

The palace of Friedenſberg, about four miles from Frederickſborg, is by far the moſt delightfully ſituated; it ſtands at a ſmall diſtance from the lake of Eſſerom, a piece of water about fifteen miles in circumference; the ground gently ſloping to its banks, and adorned with large foreſt trees. I ſcarcely ever beheld a ſituation more capable of improvement, and wiſhed for a diſciple of Brown to lay out the ground. But this beautiful ſituation is ſpoiled (if it can be

be ſpoiled) by cut yews, ſtrait walks; a profuſion of ſtatues and triumphal arches; where nature and ſimplicity are expelled; for in thoſe parts, on the oppoſite ſide of the lake, where nature is left to herſelf, nothing can exceed its beauty and pictureſque ſcenery.

The palace is a brick building ſtuccoed white, conſiſting of a front, and two wings. It was built by Frederic the Fourth, and called Friedenſberg, or the manſion of *Peace*, becauſe it was finiſhed in 1720, when the peace was concluded with Sweden, after a long war which had deſolated both countries. As a memorial of this event, a wooden pillar, painted like marble, and a ſmall ſtatue of Peace, are erected in the area before the palace, more expreſſive of the ſatisfaction with which Frederic gave peace to his ſubjects, than of his taſte in architecture. It bears the following inſcription *, *Paci ſtatuam, arcem, quodque reliquum fuit vitæ, dedicavit Fredericus Quartus*, 1720; a pro-

* To peace, this ſtatue, palace, and the remainder of his life, were dedicated by Frederic the Fourth, 1720.

miſe

inhabited by the queen-dowager, Juliana Maria; the place of her majeſty's retirement, ſince the prince royal has taken into his hands the adminiſtration of affairs.

Early the next morning we quitted the village of Friedenſberg, where we found a very neat inn, with comfortable accommodations; and returning by the palace of Fredericſborg, paſſed on to Fredericſwerk, near the Iſe-fiord, a bay of the ſea, on the northern ſhore of Zealand, where general Clauſſen has eſtabliſhed various manufactures, a foundery for caſting cannon, and other works, for the purpoſe of ſupplying the Daniſh army and navy with military ſtores.

The general, to whom we had a letter of recommendation, received us with great cordiality and politeneſs, and accompanied us over the works.

General Clauſſen eſtabliſhed theſe works in 1756, upon the expectation of a Ruſſian war, when the government was but ſcantily ſupplied with military ſtores. He fixed upon this ſpot as the moſt convenient for water

to turn the mills; gave in his propoſals to government, which were inſtantly accepted, and completed the works, notwithſtanding numerous obſtacles.

We embarked with the general upon a canal, which forms the communication between a ſmall lake, and the Iſefiord, or bay of the ſea. This cut was begun in 1717, by command of Frederic the Fourth, in order to prevent the inundations of the lake from overflowing the royal eſtates; and from thence the place was called Fredericſwerk. It was finiſhed in 1720, but as the ſoil was a light ſand, and the banks were cut in a perpendicular, and not in a ſloping direction, they fell down, and choaked the canal for a ſpace of 500 feet. The general found it therefore neceſſary to new form the canal. He cut through ſeveral parts above 70 feet in depth, ſloped the banks, covered them with earth, and in ſome places with ſea-weed, faſtened by means of the branches of fir, in order to prevent the ſand from being drifted away. He then planted the ſlopes with willows, alders, elm, and oak,

which he was obliged to water every day for a year. By theſe means the plants thrived, and now clothe the high banks to the edge of the water.

In the ſame manner he has planted the adjacent country for the ſpace of ſeveral miles, which was either a moraſs, or covered with drift ſand. Frederic the Fourth had in vain endeavoured to fertilize this waſte; for when he thought he had ſucceeded, the ſand in one year drifted over many miles; and in ſome places, to the aſtoniſhing height of 80 foot. General Clauſſen, however, has ſucceeded, and has ſhewn that ingenuity is of more avail than the power and riches of abſolute ſovereignty. By fixing the ſea-weed into the ground with the fir branches, he has rendered the ſoil ſtable, and has fertilized, at great labour and expence, a deſert of ſeveral miles. Thus, a tract of country, which before only fed two-and-thirty cows, now yields, beſides a large quantity of wood for fuel, in a favourable ſeaſon, above 500 loads of hay.

At the extremity of the canal, we turned into

into another formed entirely by the general. It was cut through quickſands, and the banks ſloped and planted like thoſe of the former. He employs at preſent only 340 men. All the workmen are his own peaſants, who of courſe labour at a reduced price. He has built for their habitation rows of houſes with rude ſtones waſhed with ſtucco, made of equal quantities of the pounded ſcoria of iron, of quicklime, and chalk. He has found from experience, that this ſtucco is extremely durable. His works conſiſt of a foundery for caſting cannon, both copper and iron, and balls, making ſaltpetre and gunpowder, with bake-houſes and breweries. He boaſted, that in 1772 he furniſhed the army of Norway with artillery in three months; and at two months notice he could ſupply a 50 gun ſhip, with all her artillery, ammunition, and military ſtores. In ſhewing us his works, he laid claim to many new inventions. He ſaws and poliſhes cannon, by means of a mill ſo contrived as to anſwer various purpoſes; he ſaws off the waſte pieces of copper from

the caſt cannon, which operation was the work of ſixteen men for three days, and is now performed in an hour. By means of the ſame mill, and a kind of turning machine, he poliſhes the cannon in the manner of turning, which uſed to be done by the tedious operation of filing. He has invented a ſimple machine to twiſt the hot iron bars together for anchors; a mode which he prefers as ſtronger and better than the uſual method of hammering the bars together. In his powder-mills he uſes copper mortars, which are much ſafer than thoſe of wood, as the latter, on being much uſed, become dry, and harbour the powder in the ſmall crevices. He employs two ranges of mortars in each row, or ſixty-four in each powder-mill, wherein uſually only twenty are uſed, and he beats only ten pounds of powder with each mortar. The expence of copper mortars is very conſiderable, as each mortar coſts twenty pounds; but then the mills are certainly leſs liable to accident; and if blown up, the mortars are again recovered.

On

On taking leave, the general preſſed us much to ſtay and dine with him; but we excuſed ourſelves, as we were under the neceſſity of reaching Elſinoor, and were engaged to dine the next day with Mr. De Conig.

In our way to Elſinoor, we ſtopped at a ſmall village, and expected to find no proviſion for our dinner. But we were aſtoniſhed at ſeeing the table covered with ſome cold proviſion, and four bottles of tokay, which the general had ſecretly ordered his houſekeeper to deliver to our ſervants.

CHAP. V.

Iſland of Huen—Biographical Memoirs of Tycho Brahe.

FOR the purpoſe of viſiting the ſmall iſle of Huen, celebrated for the reſidence of Tycho Brahe, we embarked at See Luſt on board of a five-oared boat belonging to Count Shimmelman, and in about two hours and an half landed upon the iſland.

Huen lies about ſix Engliſh miles from the coaſt of Zealand, and three from that of Sweden, nine from Elſinoor, and fourteen from Copenhagen. It formerly belonged to the Danes, but was ceded to the Swedes at the peace of Roſchild in 1658, and has ſince continued ſubject to that power.

This little iſland is ſix miles in circumference, contains a ſcattered village, one church,

which

which is a pretty object, upon the north-weſt coaſt, about 50 houſes, and 250 inhabitants. It produces hay, and every ſpecies of corn, more than ſufficient for interior conſumption. The inhabitants keep 200 horſes, 150 cows, 400 ſheep, and the ſame number of ſwine. The iſland pays, in quit-rent and taxes to the king, about 150*l.*

We landed upon the ſouth-weſt part of the iſland in a ſmall bay, juſt below the place where a ſtream, which is ſupplied by numerous pools and fiſh-ponds, falls into the ſea. We aſcended the ſhore, which is clothed to the bottom with ſhort herbage, croſſed the ſtream, and paſſed over a gently waving ſurface gradually ſloping towards the ſea, which might be converted into a beautiful lawn, and walked about a mile to a kind of farm-houſe ſtanding in the middle of the iſland, and inhabited by Mr. Schaw, a Swediſh gentleman, to whom the greateſt part of the iſland belongs. He lives here in ſummer, but in winter reſides at Landſcrona. This dwelling is the ſame as exiſted in Tycho Brahe's time, and was the

farm-houſe belonging to that aſtronomer. Having firſt paid our compliments to Mr. Schaw, we obtained from him a guide to conduct us to the remains which lie near Mr. Schaw's houſe; they conſiſt of little more than a mound of earth which incloſed his garden, and in the middle of that incloſure a deep pit, where ſtood the houſe of the aſtronomer, called Uranienburgh, and near it another deep hollow, the ſite of Stiernberg, or his obſervatory. From this delightful ſpot, the higheſt point in the iſland, we enjoyed a noble proſpect; on one ſide, the coaſt of Zealand, ſtretching from Copenhagen to Elſinoor, the two extremities of the view; the ſhores gently ſloping, embrowned to the margin of the water with rich wood, and beautifully ſprinkled with villages and villas; on the other ſide, we traced the rocky and almoſt naked cliffs of Sweden, ornamented with the diſtant ſpires of Landſcrona, Lund, Malmoe, and Helſingborg, and to the north a boundleſs expanſe of ocean, its undulating ſurface covered with innumerable veſſels ſailing in all directions.

directions. I truſt that a few biographical anecdotes of the Daniſh aſtronomer, who has rendered this little iſland remarkable in the hiſtory of literature, will not be unacceptable to the reader *.

Tycho Brahe, deſcended from a noble and illuſtrious Daniſh family, was born in 1546 at Knudſtorp, a ſmall lordſhip near Helſingborg in Scania. His father, Otto Brahe, having a large family, Tycho was educated under the care and at the expence of his uncle, George Brahe, who, having no children, adopted him as his heir. Finding his nephew a boy of a lively capacity, and though only ſeven years of age ſtrongly inclined to ſtudy, he had Tycho inſtructed in the Latin tongue unknown to his father, who conſidered literature as inglorious, and was deſirous that all his ſons ſhould follow the profeſſion of arms.

* For the life of Brahe, I have conſulted chiefly Gaſſendus's Equitis Dani Tychonis Brahe Aſtronomorum Coryphæi vita; Joſſenus de vitâ et morte Tych. Bra. Orat. Funebris; and Hoffman's Portraits Hiſt. des Hommes Illuſ. des Dannemark, article Brahe.

In

In the twelfth year of his age, Tycho was removed to the academy of Copenhagen; and his mind, which had not yet taken any direction, was caſually incited to the ſtudy of aſtronomy by an eclipſe of the ſun, which happened on the 21ſt of Auguſt, 1560. He had for ſome time examined the aſtrological diaries or almanacs, which pretended to predict future events from the inſpection of the ſtars; but when he obſerved that the eclipſe happened at the preciſe time at which it was foretold, his admiration was loſt in aſtoniſhment; and he conſidered that ſcience as divine, which could thus ſo thoroughly underſtand the motions of the heavenly bodies as to foretel their places and relative poſitions. From that moment he devoted himſelf to aſtronomy.

In 1562 he was ſent to Leipſic for the purpoſe of ſtudying civil law; but he gave to the law only thoſe hours which his tutor's importunity wreſted from him, devoting the greateſt part of his time to his favourite ſcience; and as his tutor continually remonſtrated againſt thoſe ſtudies

which

which took off his attention from the law, to which he was deſtined by his uncle, he conceived an unconquerable diſguſt for that profeſſion, and more aſſiduouſly, though ſecretly, continued his aſtronomical purſuits. For this purpoſe he laid out all the money which his uncle allowed him for pocket expences in the purchaſe of aſtronomical books: having obtained a ſmall celeſtial globe, he took the opportunity, while his preceptor was in bed, of examining the heavenly bodies, and before a month had elapſed, he made himſelf acquainted with all the ſtars which at that time appeared above the horizon.

Inſpired with the ſame ardent zeal in purſuit of his favourite ſcience, he learned geometry and mathematics without a maſter, and invented a radius, and ſeveral mathematical inſtruments.

Having paſſed three years at Leipſic, he was preparing to purſue his travels through Germany; but the death of his uncle obliged him to return to his native country, in order to ſuperintend and ſettle his eſtates, which

he

he largely inherited. Inſtead of finding himſelf encouraged and eſteemed for the wonderful progreſs, which at his early age he had made in the ſcience of aſtronomy and its concomitant ſtudies, he was mortified at being treated with contempt by his relations and acquaintance for following a ſcience which they conſidered as degrading, and who reproached him for not purſuing what they called the more noble ſtudy of the law. Diſguſted at their behaviour, he ſettled his affairs, and haſtened his departure from a country wherein he met with repeated mortifications, and before a year had elapſed ſet out upon his travels. He proceeded to Wittenberg, and afterwards to Roſtoc, where an accident happened which had nearly occaſioned his death.

Being invited to a wedding feaſt, he had a diſpute with a Daniſh nobleman relative to ſome ſubject in mathematics; and as they were both of choleric diſpoſitions, the diſpute ended in a duel. In the conflict part of Tycho's noſe was cut off. In order to remedy this defect, Tycho contrived a ſuppoſititious

ſuppoſititious noſe made of gold and ſilver, which he faſtened by means of a glue, ſo artfully formed, it is ſaid, as to bear the appearance of the real member, and to deceive many who were not acquainted with his loſs.

From Roſtoc Tycho continued his travels, and proſecuted his ſtudies in the principal towns of Germany and Italy, and particularly at Auſburgh, where he formed an acquaintance with the celebrated Peter Ramus, invented and improved various mathematical inſtruments, ſuperintended the building of an obſervatory at the expence of the burgomaſter Paul Hainzell, after a plan communicated by himſelf, and formed a ſeries of aſtronomical obſervations and diſcoveries, which aſtoniſhed and ſurpaſſed all who had hitherto been conſidered as the greateſt proficients in that ſcience.

On his return to Copenhagen, in 1570, he was ſoon diſguſted with the neceſſity of going to court; and, importuned with innumerable viſits and interruptions of his ſtudies, he removed to Herritzvold, near

Knudſtorp, the ſeat of his maternal uncle, Steno Bille, who alone of all his relations encouraged him to perſevere in his aſtronomical labours. Steno conſigned to his nephew a commodious apartment, and a convenient place for the conſtruction of his obſervatory and laboratory.

During his reſidence with his uncle, Tycho, beſides his aſtronomical reſearches, ſeems to have followed with no leſs zeal the ſtudy of chymiſtry, or rather of alchymy, from the chimerical view of obtaining the philoſopher's ſtone, that he might amaſs ſufficient riches to ſettle in ſome foreign country, where he might not be under the neceſſity of appearing at court, or having his ſtudies interrupted by receiving and paying viſits.

But neither his philoſophy, or the unwearied zeal with which he proſecuted his ſtudies, could exempt him from the paſſion of love. Being a great admirer of the fair ſex, he conceived a violent inclination for Chriſtina, a beautiful country girl, the daughter of a neighbouring peaſant, and

alienated

alienated his family by marrying a perſon of ſuch low extraction. Love is ever ingenious in deviſing excuſes. Our philoſopher juſtified the choice of his heart, and gave many whimſical reaſons for preferring a woman of low birth. He dreaded a wife who ſhould be under the neceſſity of living at court, a life to him the moſt deteſtable; he therefore preferred one whoſe ſituation neceſſarily precluded her from what he ſtyles a painful honour, who, grateful to her benefactor, would be dependent on himſelf alone, would be happy to accompany him in his travels, would conſider a ſubſerviency to his inclinations as a duty, and would not object to his continued application. Whatever effect theſe reaſons might have in inducing our philoſopher to marry, yet it may be imagined they had none on a proud family, who conceived themſelves diſgraced by Tycho's miſ-alliance, and refuſed to hold any intercourſe with him, until Frederic the Second commanded them to be reconciled. Tycho never ſeems to have repented of his choice; but ever found in his beloved Chriſ-

tina a grateful companion and an obedient wife.

About this period of his life he firſt appeared as a public teacher, and read lectures on aſtronomy at Copenhagen at the expreſs deſire of the king. He explained the theory of the planets, and preceded his explanation by a very learned oration concerning the hiſtory and excellency of aſtronomy and its ſiſter-ſciences, with ſome remarks in favour of judicial aſtrology, a ſtudy as congenial to the times as to the inclinations of our philoſopher.

Offended with his relations, and diſguſted with his countrymen, he had long determined to quit Denmark, and to ſettle abroad; and after travelling through Germany and Italy, he at length fixed upon Baſil; to the choice of which place he was influenced by the wholeſomeneſs of the air, the cheapneſs of the living, and the celebrity of the univerſity; and from whence he might hold a regular and eaſy correſpondence with the aſtronomers of France, Germany, and Italy.

On

On his return to Denmark he was preparing with the utmoſt ſecrecy to tranſport his library and aſtronomical apparatus, but was prevented carrying his deſign into execution by an unexpected ſummons from the king. Frederic, being ſecretly appriſed of his intentions, was unwilling that Denmark ſhould be deprived of ſo great an ornament, kindly embraced him, offered his protection and encouragement, preſented him with the iſland of Huen as a proper retirement, and promiſed to erect, at his expence, whatever buildings and apparatus ſhould be found neceſſary for his aſtronomical purſuits. He ſettled upon him a penſion of 1000 crowns a year, and gave him a canonry of Roſchild worth not leſs than 2000 crowns.

Tycho, aſtoniſhed and tranſported at this inſtance of his ſovereign's liberality, did not heſitate accepting the king's offer. He immediately repaired to the iſle of Huen, and on the eighth of Auguſt, 1576, was preſent at the laying of the firſt ſtone of a magnificent houſe, which he afterwards called Uranienburgh, or the Caſtle of the Heavens.

This caſtle was a ſquare building of ſixty feet, containing a large ſuit of apartments, an obſervatory, and a ſubterraneous laboratory; and although the king ſupplied 100,000 * rix-dollars, Tycho Brahe did not expend leſs than the ſame ſum. He afterwards conſtructed a detached building for his obſervatory, which he called Stiernberg, or the Mountain of the Stars †.

In this retreat Tycho Brahe paſſed twenty years, and greatly improved the ſcience of aſtronomy by the diligence and exactneſs of his obſervations. He maintained ſeveral ſcholars in his houſe for the purpoſe of inſtructing them in geometry and aſtronomy, ſome of whom were ſent and their expences

* 20,000 *l.*

† A plan of the iſland, and a curious engraving of theſe buildings and of the garden, is to be found in Portraits Hiſtoriques des Hommes illuſtres de Dannemarc, under the article Tycho Brahe.

An engraving of Uranienburgh is inſerted in the Gentleman's Magazine for November 1789, with explanations exactly ſimilar to the engravings and explanations in the Portraits Hiſtoriques, excepting that Stiernberg is omitted.

defrayed

defrayed by the king; others, who voluntarily offered themſelves, he received and ſupported at his own expence.

He did not, however, paſs the life of an anchorite or a recluſe; on the contrary, he lived in a moſt ſumptuous manner, kept an open houſe with unbounded hoſpitality, was always happy to entertain and receive all perſons, who flocked in crowds to viſit the iſland, and to pay their reſpects to a perſon of his renown.

During his reſidence in the iſland of Huen, he received numerous viſits from perſons of the higheſt rank. Among theſe muſt be particularly mentioned Ulric duke of Mecklenburgh, in company with his daughter Sophia queen of Denmark; William, landgrave of Heſſe Caſſel, whoſe correſpondence with Brahe on aſtronomical ſubjects has been given to the public, and who had ſhewn himſelf a conſtant patron to the Daniſh aſtronomer.

In 1590 Tycho was honoured with a viſit from James the Firſt, then king of Scotland, when that monarch repaired to the court of

Copenhagen to conclude his marriage with the princeſs Anne, and was ſo delighted with Brahe's apparatus and converſation, that he remained eight days at Uranienburgh. On retiring he preſented Tycho with a magnificent preſent, and afterwards accompanied his royal licence for the publication of Tycho Brahe's works with the following flattering teſtimony of his abilities and learning: "Nor "am I acquainted with theſe things from "the relation of others, or from a mere "peruſal of your works, but I have ſeen "them with my own eyes, and heard them "with my own ears, in your reſidence at "Uranienburgh, during the various learned "and agreeable converſations which I there "held with you; which even now affect my "mind to ſuch a degree, that it is difficult "to decide, whether I recollect them with "greater pleaſure or admiration; which I "now willingly teſtify by this licence to "preſent and future generations, &c."

His majeſty alſo, at his particular requeſt, compoſed, in honour of the Daniſh aſtronomer, ſome Latin verſes, more expreſſive indeed

indeed of his eſteem and admiration than remarkable for claſſic elegance.

In 1592 he was honoured with a viſit from his own ſovereign, Chriſtian the Fourth, then in the fifteenth year of his age, who continued ſome days at Uranienburgh. That promiſing young prince ſhewed great curioſity in examining the aſtronomical and chymical apparatus, expreſſed the higheſt ſatisfaction in receiving explanations and inſtructions, propoſed various queſtions on ſeveral points of mathematics and mechanics, to which his majeſty was attached, and particularly on the principles of fortification, and the conſtruction of ſhips. He was alſo highly delighted with a gilt tin globe which repreſented the face of the heavens, and was ſo contrived, that, being turned on his own axis, it ſhewed the riſing and ſetting of the ſun, the motions of the planets and heavenly bodies; a wonderful contrivance for that age. Tycho, obſerving the delight which the young king ſhewed in obſerving theſe phænomena, preſented it to his majeſty. The king graciouſly accepted it, gave

him in return a gold chain, and aſſured him of his unalterable protection and attachment.

Notwithſtanding however theſe aſſurances, the king's youth was worked upon by thoſe courtiers who were envious of Tycho Brahe's merit, or who had been offended by the violence of his temper, and the ſeverity of his ſatire, and under various pretences prevailed upon Chriſtian to deprive him of his penſion, and the canonry of Roſkild.

Tycho Brahe being thus deprived of the means to ſupport the great expences of his eſtabliſhment at Uranienburgh, quitted with chagrin his favourite reſidence, and repaired to his houſe at Copenhagen, where he waited for an opportunity to retire from his native country. Having tranſported from Uranienburgh all the inſtruments and apparatus which could be removed, he quitted Copenhagen, embarked with his wife and family, landed at Roſtock, and remained a year at Wanſbeck with his learned friend Henry Rantzau.

Having dedicated a treatiſe on aſtronomy

to

to the emperor Rhodolph the Second, who was extremely addicted to aſtronomy, chymiſtry, and judicial aſtrology, he at length received a very flattering invitation from that monarch, which he accepted without heſitation, and repaired to Prague in 1599. The emperor received him in the kindeſt and moſt honourable manner, built for him an obſervatory and elaboratory, ſettled on him an ample penſion, and treated him with the higheſt marks of deference and reſpect.

In the ſervice of Rhodolph he paſſed the remainder of his days, but did not live long to enjoy his protection. He had enjoyed a good ſtate of health till the year previous to his death, when his conſtitution, ſomewhat weakened by the intenſeneſs of his application, was ſtill farther ſhattered by the chagrin occaſioned by his removal from Uranienburgh. At that period he began to experience ſymptoms of complaints which announced his approaching diſſolution, but which he concealed as much as poſſible from his friends. He was reduced however to ſo low a ſtate as to be affected with the

moſt trifling circumſtances, which he conſidered as prodigies, and would frequently interrupt his ſallies of wit with ſudden reflections on death.

The immediate cauſe of his deceaſe was a ſtrangury, which being attended with the moſt excruciating torments, brought on a violent fever, and a temporary delirium; in the midſt of which he was heard repeatedly to cry out, "Ne fruſtra vixiſſe videar *." His delirium at length ſubſiding he became calm and compoſed, and perfectly ſenſible. Being extremely debilitated by the violence of his diſorder, he perceived that he had not many hours to live. Accordingly he gave orders with the utmoſt coolneſs and reſignation; even amuſed himſelf with compoſing an extempore copy of verſes; ſung various hymns; offered up prayers and ſupplications to the Supreme Being; recommended to his family and friends piety and reſignation to the divine will; exhorted his pupils to perſevere in their ſtudies; and

* That I may not ſeem to have lived in vain.

converſed

converſed with Kepler on the moſt abſtruſe parts of aſtronomy. Thus, amidſt prayers, exhortations, and literary converſation, he expired ſo peaceably, that he was neither heard nor ſeen *, by any of thoſe who were preſent, to breathe his laſt. He died in October 1601, in the fifty-fifth year of his age.

It is remarkable, that ſo ſenſible a man, and ſo accurate an obſerver as Tycho Brahe, ſhould be ſo infected with the rage of ſyſtem-making as to reject the ſimple and beautiful ſyſtem of Copernicus, eſtabliſhed by the moſt incontrovertible proofs, and to endeavour to reconcile the abſurdities of the Ptolemaic ſyſtem. He was, indeed, too well acquainted with the motions of the heavenly bodies, not to be ſenſible that the ſun was the centre of the ſyſtem; and though he was ſtruck with the ſimplicity and harmony of the Pythagorean ſyſtem, which Copernicus had lately revived, yet out of reſpect, it is ſaid, for ſeveral paſſages in

* Tam tranquille ut nec deficere nec viſus ſit nec auditus. Oratio Funebris, p. 27.

ſcripture,

ſcripture, he abſurdly endeavoured to reconcile (what were never intended to be reconciled) his learning with his faith: he rejected the diurnal rotation of the earth on its own axis; ſuppoſed that the earth was quieſcent; that the ſun, with all the planets, was carried about the earth in the ſpace of a year; and that the planets, by their proper motions, revolved round the ſun in their ſeveral periods; thus retaining the moſt abſurd part of the Ptolemaic hypotheſis, which makes the whole planetary ſyſtem revolve round the earth in the ſpace of every twenty-four hours.

Tycho, indeed, was ſo bigotted to his own hypotheſis, and ſhewed, even in his laſt moments, ſuch an attachment to his own ſyſtem, as to deſire his favourite ſcholar, the great Kepler, to follow his ſyſtem rather than that of Copernicus.

If we were to eſtimate the merits of Tycho Brahe as an aſtronomer, we ſhould compare the ſcience as he left it with the ſtate in which he found it. His great merit conſiſted in his inventions and improvements

of

of mathematical inſtruments, and in the diligence and exactneſs with which he made aſtronomical obſervations for a long ſeries of years. And as his inſtruments were remarkably good, he compoſed a catalogue of 777 fixed ſtars, all obſerved by himſelf, with an accuracy unknown to former aſtronomers. He likewiſe diſcovered the refraction of the air; demonſtrated, againſt the prevailing opinion of thoſe times, that the comets were higher than the moon; and from his obſervations on the moon and the other planets, the theories of their motions were afterwards corrected and improved *. He was alſo the firſt aſtronomer who compoſed a table of refractions, and ſhewed the uſe to be made of them in aſtronomy. Such is the reputation of Tycho Brahe, for his great proficiency in that ſcience, that Coſtard, in his Hiſtory of Aſtronomy, has fixed upon his name as marking the beginning of a new period.

He ſeems to have embraced a large circle

* See Bonnycaſtle's Introduction to Aſtronomy, p. 61.

of

of the arts and ſciences. He cultivated poetry, and wrote Latin verſes, not without ſome degree of claſſic elegance. He drew the plan for building the caſtle of Cronborg, and ſketched the deſign for the noble mauſoleum of Frederic the Second, which was executed in Italy, and is erected in the cathedral of Roſkild. He dabbled alſo in phyſic. He was fond of being conſulted, and readily gave his advice and medicines gratis to thoſe who conſulted him. He invented an elixir, which he calls an infallible cure for epidemic diſorders, of which he has publiſhed the recipe in a letter to the emperor Rhodolph.

He was a good mechanic. He poſſeſſed ſeveral automates, and took great delight in ſhowing them to the peaſants, and was always pleaſed if they took them for ſpirits.

He was no leſs fond of being conſulted as a fortune-teller, and willingly encouraged an opinion, that his knowledge of the heavenly bodies enabled him to obſerve horoſcopes, and foretel events. Many traditional fables of his predictions have been handed

handed down to poſterity, which ſhew his proneneſs to judicial aſtrology, and the weakneſs of thoſe who believed his predictions.

In many inſtances aſtrological predictions, by alarming, occaſion the event which they foretel, and have thus gained a falſe credit from the weak or the unwary. Thus Tycho Brahe's aſtrological predictions proved fatal to the emperor Rhodolph the Second: for, being informed by Tycho, that a ſtar which preſided at his nativity threatened him with ſome ſiniſter deſigns to his prejudice, from his relations, he was thrown into ſuch a panic, that he did not venture to quit his palace, or appear before any perſon; and, as the conduct of his brother Matthias confirmed the aſtrologer's informations, he fell at laſt a prey to his grief, and died 18th January 1612, aged fifty-nine years.

At Uranienburgh Tycho Brahe had ſeveral contrivances calculated to deceive and aſtoniſh thoſe who came to viſit and conſult him. Among others, ſeveral bells, communicating with the rooms in the upper

ſtory,

ſtory, inhabited by his ſcholars, the handles of which were concealed in his own apartments.

Frequently, when company was with him, he would pretend to want ſomething, and having ſecretly pulled the bell, would cry out "Come hither, Peter," "Come hither, "Chriſtian," and was pleaſed to obſerve the aſtoniſhment of the company, who not hearing the bells were ſurprized at the appearance of the perſon who was thus ſummoned.

He was no leſs devoted to the ſtudy of chymiſtry than to aſtronomy, and expended as much on the terreſtrial aſtronomy, as he ſtyles it, as on the celeſtial. He left, indeed, no writings upon that ſcience, although it ſeems to have been his intention to have given to the public a ſelection of his experiments, which he had made with ſo much labour and expence; yet he adds, in the true cant of alchymy, "On conſideration, and by the advice of the moſt illuſtrious as well as the moſt learned men, he thought it improper to unfold the ſecrets

of the art to the vulgar, as few people were capable of using its myſteries to advantage, and without detriment."

His foibles were as prominent as his virtues and capacity. He was of a moroſe and unbending diſpoſition, indulged himſelf in too great freedom of ſpeech *, but while he rallied others was not pleaſed to be rallied himſelf.

He was greatly addicted to judicial aſtrology, and prone to a credulity and ſuperſtition below his learning and judgment. If he met an old woman in going out of his houſe, he would inſtantly return home; and conſidered an hare as an ill omen. While he lived at Uranienburgh he had a fool, whoſe name was Sep, who was accuſtomed during dinner to ſit at his feet, and whom he uſed to feed with his own hand. This man was continually uttering incoherent expreſſions, which Tycho obſerved and noted down, from a perſuaſion that the

* Nihil fictum; nihil ſimulatum in ipſo; *ſed ſcaphum ſcapham* appellabat; unde omne quod ſuſtinuit odium.—Or. Fun. 269.

mind,

mind, in a ſtate of emotion, was capable of predicting future events; and he even believed, if any inhabitant of the iſland was taken ill, that this mad-man could predict whether he ſhould live or die. He maintained, that the cabala and magic, if they did not act to the offence of God or man, could lay open many abſtruſe things by figures, images, and marks.

But to turn from the unfavourable to the brighter parts of his character, we may aſſent to the truth of the following eulogium given by his panegyriſt; that to him his ſtudies were life; meditation his delight; ſcience riches; virtue nobility; and religion his conſtant direction *.

* Ipſi vita ſtudia erant; deliciæ vero meditatio; divitiæ ſcientiæ; virtus nobilitas; religio directio.—Oratio Funebris.

TRAVELS

TRAVELS
INTO
SWEDEN.

BOOK X.

CHAP. I.

Landſcrona — Lund — Carlſcrona — Calmar — Jonkioping — Wadſtena — Medvi — Nordkioping.

JULY 20th. After expreſſing to Mr. Elliott our warmeſt acknowledgments for his polite and friendly attention to us, we quitted Copenhagen at four in the evening; embarked in a four-oared boat, and ſailed to Landſcrona with a favourable breeze. The diſtance is about ſixteen miles.

On approaching Landſcrona, we were embarraſſed with ſhoals and rocks; and as the Daniſh watermen were unacquainted with the coaſt of Sweden, we could not diſengage ourſelves, and ſhould have been compelled to return to Copenhagen, if fortunately two Swediſh ſailors, obſerving our diſtreſs, had not waded through the ſea, and conducted our veſſel into port.

Landſcrona, a place of very little ſtrength, is now ſtrongly fortifying, and will become a fortreſs of great conſequence, if the works ſhould ever be completed. But it ſeems as if the Swedes, in all their undertakings, formed plans much too great and expenſive for their finances and power; and conſequently, that they ſeldom can finiſh what they begin. Such has been the fate of Carlſcrona, Trolhætta, and Sveaborg; and, perhaps, Landſcrona will furniſh another inſtance of their attempting to execute what exceeds their revenue.

The object of the works now carrying on at Landſcrona is to erect a fortreſs, which ſhall command the whole coaſt of

Scania

Scania lying oppoſite to the Iſle of Zealand, and to form a harbour for gallies.

The old fortreſs or citadel mounts ſeventy-four guns, and requires a garriſon of two or three hundred men.

The harbour lies between the continent and a ſmall iſland about half a mile in circumference, and is at leaſt twenty feet in depth, and will form a very commodious ſtation for the gallies.

This harbour is to be protected by a new citadel on the ſmall iſland. For this purpoſe the iſland is encircling with walls and baſtions of hewn granite. The works are very laborious and expenſive; for the ground being a moraſs, the iſland muſt be drained by means of windmills, and the foundations of the fortifications and buildings be laid on piles. The town alſo, towards the land, is encircling with an extenſive range of fortifications, no leſs expenſive and difficult than the former.

Being from former experience well acquainted with the mode of travelling in this country, we ſent forwards our Engliſh poſt-

chaiſe from Copenhagen to Stockholm, and purchaſed for ourſelves two ſmall peaſant's carts, each provided with an arm-chair hung upon ſprings. In theſe vehicles we went uſually at the rate of eight or nine miles in an hour, and not unfrequently travelled from eighty to a hundred miles in a day.

The regulations of the poſt are very excellent. At each poſt-houſe is kept a day-book or journal, in which each traveller ſets down his name and character, the day and hour of his arrival and departure, the place from whence he came, and whither he is going, and the number of horſes he requires. One column is appropriated to complaints; ſo that if the poſt-maſter is impertinent or impoſing, his conduct is known, as the journal is every month inſpected by the officers of government.

Lund, about twenty miles from Landſcrona, and the capital of Scania, is eſteemed the moſt antient town in Sweden, according to an old proverb, that when our Saviour was born, Lund was in its glory. The ſimilarity of the genitive caſe, Lunden,

to

to the name of the Engliſh capital, has led ſome antiquarians to conjecture, that London derived its appellation from this place.

Lund contains ſcarcely more than 800 inhabitants, carries on but little trade, and is principally ſupported by its univerſity, eſtabliſhed by Charles the Eleventh, and called, from the name of its founder, *Academia Carolina Gothorum*. There are twenty-one profeſſors, and three hundred ſtudents. The library contains 20,000 volumes.

The botanical garden is by no means in a flouriſhing ſtate, the number of plants not exceeding 1200.

Lund is an archbiſhopric. The cathedral is an antient irregular building, raiſed at different intervals. The clerk did not omit to carry us into a ſubterraneous chapel, with a vaulted roof ſupported by groteſque pillars; on two of which are the figures of a man and woman carved in ſtone, ſtretching out their arms, as if they were attempting to pull down the pillars. Theſe groteſque figures have given riſe to the following legend:—A giant built the chapel,

at the requeſt of the firſt biſhop, on condition that the latter ſhould promiſe to give him either the ſun and moon, his two eyes, or find out his name. When the building was nearly finiſhed, the biſhop, who had not yet found out the giant's name, walked in the environs of the town in great anxiety to a neighbouring eminence, and happened to hear the giant's wife call her huſband by the name of Fin. Elated with this diſcovery, he returned to the town, and ſaluted the giant by his name. The latter was ſo enraged, that he endeavoured, with the aſſiſtance of his wife, to pull down the chápel; but in their firſt attempt they were turned into ſtones.

Our journey lay through Chriſtianſtadt, which I have mentioned in my former tour to Carlſcrona. The variety of the country, the wildneſs of ſome of the views, the beauty of others, the fertility of the ſmall vallies, and the romantic appearance of the overhanging rocks, formed a moſt pleaſing and agreeable contraſt. Although the baſis of the ſoil is entirely granite, and vaſt fragments

ments of rock overſpread the face of the whole country, yet the ſuperficies is principally green. In ſome parts juniper buſhes over-run the ſoil; in others large foreſts of oak and pine ſtart from the crevices of the rock, where there ſcarcely appears nutriment for the ſmalleſt vegetable. The vallies, numerous but ſmall, abound with corn and paſture. It was hay harveſt, every atom of ſoil was employed; and I obſerved ſeveral peaſants making hay upon a ſlip of land, which could almoſt be covered with a ſheet; and here and there a ſtone five or ſix feet high over-ſhadowing a *field* of corn.

An interval of five years had elapſed ſince my former * viſit to Carlſcrona, and I did not find the works advanced as much as I could have expected. Inſtead of building one dock every year, as was intended, only one has been finiſhed in the ſpace of nine years ſince the commencement of the undertaking; and as only two more were in the leaſt forwardneſs, it will probably be a

* Book VII. c. xi.

century before the plan is completed. The dock which is finiſhed gives a completo idea of the expence and greatneſs of the plan. The bottom and ſides are of hewn granite, rows of granite pillars ſupport the roof, and bear rather the appearance of a colonnade to a temple, than a receptacle for ſhips.

In our route from Carlſcrona to Calmar, we paſſed through large foreſts of lofty pines and firs, which were planted by the hand of nature, and ſcarcely intermixed with any other trees, excepting in the environs of the villages. Thoſe pines appeared extremely lofty in compariſon with the narrowneſs of the road which winded at their feet, and was over-ſhadowed by the branches converging to, and almoſt touching, each other.

July 25. As we approached Calmar, we emerged from the gloom of the foreſt, and burſt upon a fine view of the ſea, with a diſtant proſpect of the Iſle of Oeland. The weather was delightful, the ſea calm, and numerous veſſels covering the ſurface of the waters to the fartheſt extent of the horizon,

horizon, rendered the ſcenery as animated as it was beautiful.

Calmar, ſeparated from the Iſle of Oeland by a ſtrait about ſeven miles broad in its narroweſt part, is a ſmall town ſcarcely a mile in circumference, but ſtrongly fortified. The ramparts are at preſent unprovided with guns, which have been lately removed to Landſerona and Chriſtianſtadt, from the rumour of a Daniſh war. The ſtreets croſs each other at right angles. The town contains 450 houſes. The inhabitants carry on a ſmall trade, and poſſeſs, beſides ſmall craft, about ſeventy veſſels, from 100 to 300 tons burthen.

Calmar is celebrated in the hiſtory of the north, for being the place where the deputies of the three kingdoms of Sweden, Denmark, and Norway, were appointed to aſſemble for the election of a king, according to the union of Calmar; an union as favourable to Denmark, as it was contrary to the intereſts of Sweden: it was upheld by the vigour and abilities of Margaret, but, under her weak and unwarlike ſucceſſors,

entailed

entailed upon Sweden a ſeries of convulſions and troubles, until it was finally diſſolved by the valour and prudence of Guſtavus Vaſa.

About half a mile from the town is the caſtle, ſtanding on an eminence, the only remains of the antient magnificence of Calmar. The building has been conſtructed at different intervals, and contains a motley mixture of Gothic and Grecian architecture. I obſerved over one of the doors an inſcription, John III. 1568. Parts of the manſion, however, are much older, as the apartment in which the deputies of the three kingdoms uſed to aſſemble ſtill ſubſiſts: It is 94 feet long, and 30 broad. This palace, once the reſidence of the celebrated Margaret, and ſo remarkable in the hiſtory of this country, is now converted into a diſtillery.

Inſtead of proceeding by the direct road from Calmar to Stockholm, we made a circuit through the interior parts of Sweden, the provinces of Smoland and Eaſt Gothland, and paſſed through Jonkioping, Wadſtena,

ſtena, Medvi, Linkioping, and Nordkioping.

In traverſing Smoland, it was curious to obſerve the immenſe tracts of foreſts of pine and fir; the approach to the villages, announced by groves of oak, beech, and birch; and the numerous plots or parterres of arable land among paſtures and rocks. I have frequently obſerved an acre of ground laid out with alternative ſlips of rye, barley, flax, hemp, the intervals between and around ſown with graſs. I paſſed many ſpots in which the trees were cut down and burning in order to manure the ſoil, and render it fit for paſture or corn.

An intelligent traveller *, ſpeaking of the agriculture of Smoland, ſays, "I found a tolerable ſoil in Smoland, without ſand or heath; but the large detached ſtones and maſſes of granite with which it is overſpread, render the greateſt part unfit for the plough. In the crevices of theſe ſtones, and between the pines and fir, underwood grows rapidly.

* Profeſſor Bueſch, of Hamburgh.

"The

"The peaſants ſelect a ſpot of ground in the midſt of the foreſt, cut down the trees, ſtrew them over the ground, and burn them when dry. They then dig the earth between the ſtones with a ſpade, ſow and harrow it with rakes, and obtain a good crop of corn for two ſucceſſive years. The ground is then converted into paſture, and is chiefly employed in feeding cattle, which, both in this province and Halland, thrive well, make a good appearance, and form an advantageous article of export. Theſe ſpots of land thus converted are called *Swedja Land*, or burnt land, and in the ſpace of fifteen years are again covered with wood. This mode of culture has been uſually cenſured by many travellers, as very unprofitable and detrimental, but without ſufficient reaſon; for many of theſe ſpots cannot be uſed to any other purpoſe, being too ſtony, and the trees of little value."

Veils are commonly worn in Sweden, not only by the ladies, but even by the female peaſants when at work in the fields; a cuſtom which ſtrikes an Engliſh traveller for its

its ſingularity, but which is uſeful in theſe parts, in order to ſhade the eyes from the glare of the ſnow in winter, and from the rays of the ſun, ſo ſtrongly reflected from the rocks, in ſummer.

As we approached Jonkioping, on the third day's journey from Calmar, the country became ſomewhat leſs foreſty, and the views more extenſive, though not leſs rude and rocky. About a mile from Jonkioping we came to the top of an eminence, whoſe ſummit was covered with fir, and its feet with beech and oak. We looked down upon that town, lying beautifully between two ſmall lakes, and at the ſouthern extremity of the Wetter, a lake of an oblong ſhape, and of ſuch length, that it appeared like an arm of the ſea. It is at leaſt 100 miles in length, and from ſix to twenty-ſix miles broad; its ſhores are gently ſloping, and moſtly clothed with firs.

Jonkioping is the capital of Smoland, and the ſeat of the parliament or ſuperior court of juſtice for the kingdom of Gothland. The town is no more than two miles in

circumference, and contains about 3000 inhabitants. The houſes are moſtly of wood, covered with turf. Excepting the houſes in the largeſt towns, and gentlemen's ſeats, few of the buildings in Sweden are roofed with tiles. They are principally covered with turf or moſs, no thatching being uſed, as both too dear, and dangerous in caſe of fire. In order to keep out the rain, large layers of birch bark are ſpread over the timber-work of the roof, under the covering of turf or moſs. Theſe turf roofs make a ſingular appearance, many of them producing herbage, which is occaſionally cut for the uſe of the cattle. I obſerved a few ornamented with flowers.

In quitting Jonkioping, we coaſted the weſtern ſhores of the Wetter, through a hilly, ſtony, but well cultivated and woody country, the road ſometimes running cloſe to the margin of the water, ſometimes carried over the ſteep precipices which form the ſhores of the lake. The vaſt expanſe of water, which near Jonkioping is too uniform, was partly broken by an iſland about

ſeven

ſeven miles in circumference, and the view was diverſified with a ſmaller lake.

The ſmall town of Wadſtena, on the borders of the lake Wetter, is remarkable for its caſtle, a ſingular building, defended at the four corners by round towers, covered with ſmall domes. This caſtle was built in 1544 by Guſtavus Vaſa, and inhabited by his ſon Magnus, who was inſane. The church, a large handſome building, contains his ſepulchre, and the remains of Catharine, wife of Charles Canutſon, and of Philippa queen of Eric the Thirteenth.

The lake Wetter, like all inland pieces of water ſurrounded with hills or mountains, is ſubject to ſudden ſtorms in the ſtilleſt weather. Superſtition or credulity not unfrequently find cauſes for all phænomena of nature; and I was informed at Copenhagen, that theſe ſudden ſtorms on the lake Wetter were occaſioned by a ſubterraneous communication with the lake of Conſtance, in Switzerland; for it had been diſcovered, by a regular ſeries of correſpondence and obſervation, that when the waters

of one lake aroſe, thoſe of the other fell in the ſame proportion; and that frequently the waters of the Wetter were violently agitated without the leaſt wind, or any apparent cauſe, until information arrived, that at that very time the lake of Conſtance had been diſturbed by a tempeſt. The perſon who gave me this information further added, in favour of this phænomenon, that ſimilar plants were obſerved to grow ſpontaneouſly in the neighbourhood of each lake; and that the ſame fiſh were likewiſe caught in both lakes.

On my arrival at Wadſtena I found a gentleman, to whom I had a letter, ſtrongly impreſſed with the truth of this account, and particularly affirming, that a ſeries of correſpondence and obſervation had eſtabliſhed its truth. But when I requeſted a ſpecific proof, I found that his aſſertion was principally grounded on tradition; and that no correſpondence on the ſubject had been carried on by any perſon now alive, but by the great-grandfather of ſome inhabitant of Wadſtena.

I ſhould

I ſhould not have thought this idle ſtory worthy of mention, if the fact had not been poſitively affirmed by perſons of ſome note at Copenhagen; if it was not the generally received opinion at Wadſtena; and if ſome travellers had not been ſufficiently impoſed upon to relate it in their travels.

At Motala, we croſſed the river of the ſame name, which iſſues from the Wetter, and is not navigable for the ſmalleſt veſſels, and ſoon arrived at Medwi, the Swediſh Spa.

Medwi is pleaſantly ſituated in a gently waving and richly wooded country. The lodging-houſes form one ſtreet of uniform wooden buildings painted red. The walks and rides are delightful, particularly to the banks of the Wetter. The waters of the Spa are vitriolic and ſulphureous.

The regulations of this place ſeem more calculated for the accommodations of the ſick who come to drink the waters, than for the company who aſſemble for pleaſure. Between five and ſix in the morning the company are awakened by the ringing of a

large bell, when they uſually riſe, drink the waters, breakfaſt, ride out, or walk. Preciſely at twelve dinner is ſerved in a large hall, to which all the company repair. After dinner they play at cards till five, when they take their afternoon's airing. At ſeven ſupper is ſerved in the ſame hall; at nine the bell rings, the gates are ſhut, no carriages are admitted, and the company moſtly retire to bed.

We had purpoſed paſſing a week at Medwi, but the ſeaſon being paſt, and the company gone, excepting a few invalids, we continued our journey to Stockholm, through Linkioping and Nordkioping.

Having repaſſed the Motala, we aſcended an eminence, and deſcended into the largeſt and moſt cultivated plain I had yet ſeen in Sweden, fertile in corn and paſture, bounded by a ridge of hills, whoſe ſides and ſummits are prettily wooded, and whoſe feet were watered by the Motala, forming a ſucceſſion of lakes. The plain is open, and the fields large; frequent churches, villages, and country ſeats occured; and the

ſcene was enlivened by the hay-harveſt.

In the midſt of this plain ſtands the ſmall but neat town of Linkioping. It contains the epiſcopal palace, the cathedral, and the palace in which reſides the governor of Eaſt Gothland.

The axle-tree of one of our carriages breaking, we were detained here for two hours; and the night coming on, we were prevented from enjoying the beauties of the country, which appeared from the dim light of the ſtars more rocky and hilly as we approached Nordkioping, where we did not arrive before one in the morning.

Nordkioping is one of the largeſt and moſt commercial inland provincial towns in Sweden. It covers a large ſpace of ground, being ten miles in circumference; but the houſes are ſmall and ſcattered, and the inhabitants do not exceed 10,000. Its ſituation on the Motala is exceedingly pictureſque. That river flows through the town, forms a ſeries of cataracts, and is divided into four principal ſtreams, which

encircle ſeveral rocky iſlands, covered with houſes and manufactories. At the extremity of the town it is navigable for ſmall veſſels.

Several manufactories are eſtabliſhed in the town; fifty-five fabrics of cloth, which employ 1500 men; three ſugar-houſes; one of ſnuff; fifty mills for grinding corn, which is exported in large quantities; and a braſs foundery.

The fabric of arms mentioned by Mr. Wraxall no longer exiſts, the proprietor being a bankrupt.

A ſalmon fiſhery gives employment and riches to many of the inhabitants.

A few miles from Nordkioping we aſcended a high chain of granite mountains, which run from eaſt to weſt; the ſtupendous maſſes of rocks impending over the road, highly pictureſque, reſemble the firſt Alpine paſſes in Switzerland. From the ſummit we looked down upon the rich plains we had paſſed the preceding day, and the Motala winding and flowing into the Bay of Brunick. On deſcending this chain, we traverſed a ſucceſſion of plains

and

and rocks which ſtretch from north to ſouth. The plains are exceedingly fertile in grain and paſture, and watered by numerous rivers and lakes. The villages are numerous, chiefly ſcattered at ſmall diſtances from each other; groupes of two or three cottages placed on rocky eminences, and many churches ſtanding ſingly, in the moſt pictureſque ſituations, diverſified the ſcenery.

At Filtja, the laſt poſt previous to our arrival at Stockholm, we admired a beautiful bay of the lake Maeler, bounded by perpendicular, rocky, and woody banks. The nearer we approached the capital, the more deſolate the country appeared. It was almoſt entirely covered with rocks or foreſts, exhibiting ſcarcely any traces of human induſtry, excepting a few patches of corn and paſture in the midſt of the foreſt, and about a dozen habitations. This dreary ſcene continued till we aſcended an eminence, and came upon a ſudden view of the ſpires of Stockholm, half hid by the intervening rocks and trees.

CHAP. II.

Palace of Drotningholm—Gala Day at Court—Swediſh Opera—Profeſſor Sergell—Remarks on ſeveral late changes effected in the Government of Sweden.

DURING my former travels into theſe parts, I was prevented by the earlineſs of the ſeaſon, and the difficulty of croſſing the lake Maeler, from viſiting the palace of Drotningholm; but in my ſecond tour I had ſeveral opportunities of ſatisfying my curioſity.

The palace of Drotningholm, the favourite reſidence of the king, is ſituated upon the iſland of Drotningholm or Queen's Iſland, in the lake Maeler, about ten Engliſh miles from Stockholm. The paſſage acroſs the lake to the iſland is near a mile.

The palace was originally built by Hedwige Eleonora, queen of Charles the Tenth; but

but has been greatly improved and enlarged by ſucceeding ſovereigns, and particularly by his preſent majeſty, who has added a theatre, and ſeveral other buildings. The apartments are more comfortable than magnificent. The king's private library contains an uſeful collection of modern books. A cabinet of natural hiſtory adjoining to the library is ſmall, but remarkable as having been arranged and deſcribed by Linnæus.

The ſtate apartments contain paintings of the battles of Charles the Eleventh, the coronation of that monarch, and the portraits of the principal generals who ſerved under Charles the Twelfth, by Ehrenſwald.

The garden * is chiefly laid out in ſtrait walks,

* The king has ſhewed a finer taſte in the gardens of Haga, a villa belonging to his majeſty, which have been laid out under his own direction in a ſtyle more reſembling Engliſh pleaſure-grounds, than any which fell under my obſervation abroad. The walks are carried by the ſide of a lake, and through the woods, by a gradual and gently-bending outline.

walks, excepting a ſmall part, which is called the Engliſh garden, and was forming in a fanciful imitation of our ſtyle.

In the midſt of the garden is a ſpot called Canton, which has been too pompouſly deſcribed by many travellers. It receives that denomination from ſeveral buildings in the Chineſe taſte, diſpoſed in a ſemicircular form, and erected by the late king: they contain ſeveral large Chineſe figures, and vaſes of very valuable porcelain. In theſe apartments his majeſty invites ſelect parties to dinner and ſupper, when he lays aſide his etiquette.

On the 8th we paſſed the whole day at Drotningholm, according to the tedious forms of Swediſh etiquette, to which his majeſty is ſo much attached. We ſet off full-dreſſed from Stockholm at eleven; and,

Haga, though a wooden building, is one of the king's moſt favoured villas, endeared to him as being the place where he conſulted with his particular friends on the beſt means for effecting the revolution of 1772, and from which he took the title of Count de Haga, which he aſſumed during his travels.

as the weather was ſhowery, the embarkation in the foreign miniſter's barge was rather diſagreeable.

We found the drawing-room crouded with company to congratulate the king on his late arrival from his travels. It was gala day, and we ſaw the court in all its ſplendor. The gala dreſs of the court for both men and women is blue ſilk and ſatin, with white lining and ornaments. The company appeared to a ſtranger as if they were habited for a maſquerade.

After church the king made his appearance. His majeſty wore a fancy dreſs of purpliſh ſilk, much embroidered with gold; for the king, while he has limited his ſubjects to particular colours, aſſumes the liberty of varying his own dreſs with all the tints of the rainbow.

On my being preſented, his majeſty did me the honour to converſe with me in the moſt gracious manner; recollected having ſeen me before in Sweden; talked to me of the docks of Carlſcrona, and aſked me if I had ſeen the dock of Toulon; adding,

adding, "It is not for me to boaſt, but in "my eſtimation the works of Toulon are "trifling in compariſon with thoſe of Carl-"ſcrona. We do not boaſt of pictures and "ſtatues, but we can ſhew the works at "Trothætta, Carlſcrona, and Sveaborg."

Soon after he repaired to a large ſaloon, dined in public, with the queen and royal family, and converſed with the foreign miniſters, who ſurrounded his chair. At two he roſe from table; and we dined with the great marſhal, who keeps a public table on theſe occaſions.

About half paſt five we were preſented to the prince royal, who, although ſcarcely ſix years old, went through the forms of a drawing-room with wonderful eaſe and addreſs for ſo young a perſon.

We afterwards repaired to the Swediſh opera of Iphigenia in Aulis, tranſlated from the French, and the words adapted to Gluck's muſic. The theatre is ſmall but neat; the ſtage was well filled, and the piece well performed.

At the concluſion of the opera we embarked

barked in a covered barge, croſſed the water in the rain, got into our carriage, and arrived at Stockholm about midnight. Such is the neceſſary etiquette of the Swediſh court; but the king contrives as much as poſſible to relieve the *ennüi* of the day by the affability of his manners, and the vivacity of his converſation.

The preſent king has paid great attention to the literature and language of his native country. He has conſtructed, at a conſiderable expence, an opera-houſe in Stockholm, for the repreſentation of operas in the Swediſh language. The building is ſmall, but well arranged, and will contain about eight hundred ſpectators. The ornaments, ſcenes, and decorations, are extremely rich and elegant. The troop, conſidering the recency of the eſtabliſhment, will no doubt greatly improve, as the king loves and encourages theatrical repreſentations, and has compoſed ſeveral pieces for the ſtage.

The polite arts have made their way into Sweden, and flouriſh under the king's patronage.

Among

Among the living artiſts who do honour to their country, muſt be mentioned Mr. Sergell, a ſtatuary, who paſſed ſome time at Rome at the king's expence, and is now ſettled at Stockholm. His work-ſhop contained ſeveral ſtatues and models, which prove his taſte in ſeizing the ſpirit of the antique. I particularly admired a moſt elegant Cupid and Pſyche; Otriades, in the agonies of death engraving upon his buckler, with the point of his lance, Δι Τροπαιω, "To the God of Victory," his countenance expreſſing a fine aſſemblage of pain, ſurmounted by courage; a buſt of Guſtavus Adolphus, round which the prince royal is entwining a wreath of laurel, in the true ſpirit of the antique.

Mr. Sergell is likewiſe employed in ſuperintending and finiſhing the equeſtrian ſtatue of Guſtavus Adolphus in bronze, after the deſign of Archeveque, a celebrated French ſtatuary, ſince dead. It is of a coloſſal ſize *, and repreſents Guſta-

vus

* The following are its dimenſions: Height, from the

vus Adolphus, the favourite hero of Sweden, in complete armour, excepting his head, which is encircled with laurel; his right hand holds a truncheon pointing downwards. The hero ſits well on the horſe, and the animal has great ſpirit.

Mr. Sergell has added to the original deſign the figures of Hiſtory, pointing to an inſcription on the pedeſtal; and Axel Oxenſtiern, the celebrated chancellor, who was no leſs pre-eminent in the cabinet than his maſter Guſtavus Adolphus in the field.

Mr. Sergell informed me, that the original plan of Archeveque was to repreſent a Victory on horſeback, preceding and crowning Guſtavus Adolphus on horſeback; a ſublime idea, bold, and perfectly new for a ſtatue. The plan was at firſt accepted by the ſtates, but afterwards al-

the bottom of the pedeſtal to the top of the hero's head, forty feet; from the bottom of the horſe's feet to the top of the hero's head, eighteen feet; height of the hero, if ſtanding, fourteen feet; length of the horſe, from the head to the crupper, ten feet. Figure of Oxenſtiern, nine feet.

tered,

tered, becauſe it was thought impoſſible by the perſon employed to caſt it. Mr. Sergell expatiated with great enthuſiaſm on the boldneſs and ſublimity of this plan, and ſeemed by no means to conſider it as impracticable.

Mr. Sergell has been lately employed by the king in executing a monument to the memory of Des Cartes, which is erected in one of the churches of Stockholm. Above is the medallion of Des Cartes, and beneath an angel taking a veil from the globe, and illuminating it with a torch; a ſublime idea, ſimply expreſſing the effect of philoſophy in enlightening the human race, but weakened by the angel's pointing to "Stockholm," written in golden characters. For the tomb itſelf ſufficiently proved, that the philoſopher died * at Stockholm; and the appropriation of the light of philoſophy to a particular ſpot, ſubſtitutes what is partial and confined to what is general and comprehenſive.

* His body was tranſported to Paris, and buried in the church of St. Genevieve.

The

The royal academy of painting and ſculpture at Stockholm contains the fineſt collection of caſts from the antique ſtatues at Rome, that ever fell under my obſervation. Theſe caſts were the firſt impreſſions of the only moulds which were ever permitted to be taken from the antique ſtatues. Louis the Fourteenth obtained that permiſſion from the pope, and ſent to Charles the Eleventh theſe caſts, which are therefore uniques in their kind. They were given by the late king Adolphus Frederic to the academy of painting and ſculpture, which he inſtituted.

The truth of the obſervation which I ventured to advance, that the king of Sweden is a limited and not an abſolute monarch, though controverted by ſome authors, is ſtill farther confirmed by the tranſactions of the diet which aſſembled in May 1786, in which ſeveral new regulations were ſettled, tending to limit the prerogative in the power of making, amending, and repealing laws, of removing perſons from public employments, in the im-

poſition of taxes, and the permanency of the revenue.

In regard to the firſt point, the power of making, amending, and repealing laws, it had long been a queſtion of diſpute, whether a bill being propoſed by the king, if two houſes were for it, and two againſt it, the deciſion ſhould be left to his majeſty: but it was finally reſolved by the ſtates, and agreed to by the king, that under theſe circumſtances the propoſed bill ſhould not take place; and that when three houſes were of the ſame opinion, that opinion ſhould be conſidered as the ſenſe of the ſtates; all queſtions of privilege and taxation excepted, in which the unanimous conſent of the four houſes ſhould be requiſite.

With reſpect to the ſecond point, the power of removing perſons from public employments, it was reſolved that, whereas the king, in the ſecond article of the form of government, promiſes not to ruin any man as to his life and honour, body or welfare, unleſs lawfully convicted and judged; under the word *welfare* are included public offices

offices and employments: no man, therefore, can be deprived of any civil, military, or eccleſiaſtical employment, without previous trial or judgment, according to the laws of the land, excepting thoſe public officers of ſtate, and committees mentioned in the form of government, who are liable, as before, to be removed by the king.

As to the third point, it was decreed, that the ſubſidies voted at the preceding diet to remain in force till the next meeting of the ſtates, ſhould now be continued for four years only; and that one per cent. ſhould be deducted; a deduction which, however ſmall, was made in order to prove, that the grant of the extraordinary revenues depended entirely on the good pleaſure of the diet, and that the revenue of the crown was by no means fixed and permanent. An important regulation, which almoſt renders it neceſſary for the king to ſummon the diet in four years, unleſs he can render (what is not poſſible) his fixed revenue equal to the public expenditure.

But as an additional proof that the king, by the revolution of 1772, was not deſpotic, it is only neceſſary to add, that he has lately obtained new prerogatives; and has effected, with the conſent of the ſtates, ſome changes in the form of government, which render him ſtill more powerful.

When the king was leading his army into Ruſſia, and was preparing to beſiege Fredericſham, which if he had taken he might have marched perhaps almoſt without interruption to the gates of Peterſburgh, he was checked in the midſt of his career by the revolt of ſeveral of his officers, who refuſed to paſs the limits of Swediſh Finland, under the pretence that the king had no power to carry on offenſive war without the conſent of the ſtates.

A deſpotic ſovereign would inſtantly have arreſted and condemned the refractory officers to death, have appointed others in their places, and have continued his progreſs againſt the enemy. But the king, who was not deſpotic, arreſted the officers, but ſent them

them to Stockholm, to be tried according to the laws of their country, and immediately recalled his troops from the Ruſſian territory.

Not long afterwards he convened the ſtates, laid before them the motives which induced him to attack Ruſſia, obtained from the majority of the four houſes an approbation of his conduct, and ſupplies for the ſupport of the war.

Convinced alſo from recent experience, that the king ought to poſſeſs the power of declaring offenſive war, and of diſpoſing of all military commiſſions under him, he propoſed, under the title of the Act of Safety, ſeveral alterations in the new form of government. The three houſes of clergy, burghers, and peaſants, acceded to this act; but, as the nobles perſiſted uniformly in oppoſing it, and refuſed to regiſter it as the ſenſe of the ſtates, the king ventured to arreſt the principal perſons in oppoſition; and ſummoning the ſtates to his palace, he addreſſed the order of nobles in the following manner:

"I have waited with every indulgence the iſſue of your long deliberations, in the hope that patience and reflection would at length overcome your oppoſition. I find, however, that this hope has proved fruitleſs; knowing that the intereſts of my ſubjects will not admit of any longer delay, and as the laws of the kingdom, and the reſolutions of the diet in 1786, ſtate that every future act, tending to explain the conſtitution (and ſuch is the Act of Safety) ſhould become a law by the plurality of the orders of the ſtate, I conſider that your preſident, Count Lowenhaupt, is fully competent to ſign the act, in the name and on behalf of your order."

Count Lowenhaupt immediately ſigned it.

Theſe ſtrong meaſures were not effected without the connivance of the three other houſes; and the bulk of the people undoubtedly ſided with the king.

The king has alſo ſtill further extended his own prerogative, and diminiſhed the influence of the nobles, by aboliſhing the

ſenate,

ſenate, which, though deprived of its powers by the revolution of 1772, was ſtill conſidered as the principal ſupport of the ariſtocratical intereſt, and was the great channel of political and judicial diſcuſſion. Inſtead of a body entirely confined to the nobles, and conſtituting the firſt ſupreme court of juſtice, and whoſe conſent was neceſſary in order to render valid all acts and decrees of the crown, the king has appointed a new council, divided into two departments:

1. Called the court of reviſion for judicial affairs, or the ſupreme court of judicature, without appeal, and conſiſting of ſix nobles and ſix commoners.

2. For matters of inferior œconomy, conſiſting of eight nobles and four commoners.

But even by theſe increaſed prerogatives, conferred on the crown by the Act of Safety, the king is ſtill far from being a deſpot, becauſe he does not poſſeſs, what I cannot but conſider as the two great features of deſpotiſm, the power of enacting laws, and of impoſing taxes. Though he now enjoys the prerogative of declaring war and making

peace, yet as he cannot ſupport a war without the grant of ſubſidies, and as he cannot lay on a ſingle tax without the conſent of the ſtates, the declaration of war muſt be conſidered as a mere formality, and as ultimately depending on the approbation of the ſtates.

It is not my intention to enter into a controverſy, how far the powers poſſeſſed by the king of Sweden are too great for the ſovereign of a free people; or whether the ſtates have acted inconſiſtently or unwiſely in granting ſuch an extent of prerogative: thus much is certain, that the changes were effected by the conſent of the majority of the ſtates, and with the concurrence of the people at large; and that the ſame powers which acceded to the Act of Safety may, on ſome future occaſion, limit the royal prerogative, if found to be too dangerous to the liberty of the ſubject. The king has but a ſmall ſtanding army; the greateſt part of the troops conſiſt of a national militia, who, inſtead of ſupporting him in any arbitrary meaſure, would be the firſt to oppoſe

poſe him. And as almoſt the whole body of the nobility, whom he has diſguſted and lowered, watch his conduct with a jealous eye, and are ready to oppoſe his meaſures and moleſt his government, whenever he ſummons the ſtates, the permanence of the king's authority ultimately depends on conciliating the three houſes of the clergy, citizens, and peaſants, and on the affections of his people.

CHAP. III.

Commerce of Sweden—A comparative View of the Exports and Imports for 1781—*Revenues and Expenditure—Bank of Stockholm.*

A General idea of the commerce of Sweden will be beſt found by a comparative ſtate of the exports and imports for 1781.

EXPORTS.

	£.	s.	d.
Copper plates, ordinary -	22,308	11	11¼
Copper, refined - -	26,579	2	7¼
Hammered copper plates -	90	13	0¼
Large copper plates -	1,979	3	0¼
Old minted copper plates -	42,798	1	3
Different ſorts of copper -	1,572	3	0¼
Braſs - - -	2	1	11¼

Braſs

	£.	s.	d.
Braſs wire	39,079	5	7½
Braſs kettles	0	11	8
Different ſorts of braſs	112	2	2½
Iron anchors	2,343	10	10
Iron plates, tinned	1,079	16	11½
Iron plates, not tinned	23	6	8
Iron cannons	9,799	0	10
Balls	194	16	8
Iron pots	104	3	7½
Different ſorts of ſmaller bar iron	30,556	14	7
Ordinary bar iron	524,104	11	4½
Iron plates	15,329	0	5
Steel	7,528	5	10
Steel wire	54	0	5
Nails	8,677	10	7½
Ditto, coarſer	9,049	1	11½
Wrought iron of the finer ſort	5,776	3	6½
Ditto of the coarſer ſort	14,954	3	1½
Different ſorts of iron and ſteel	620	17	1
Axle-trees	307	16	10½
Beams of fir	1,496	11	4½

Ordinary

	£.	s.	d.
Ordinary deals - -	53,029	0	10
Thicket deals - -	12,802	14	0½
Planks of the thickeſt ſort	8,248	9	2
Lath - - -	499	1	0½
Fir planks - -	208	8	9
Maſts - - -	354	0	10
Rafters - - -	23	1	0½
Thicket ſpars - -	79	15	8
Ditto, leſſer ſort - -	1,279	0	10
Laths - - -	303	14	0½
Staves of beech wood -	227	13	2½
Wood - - -	421	0	2½
Ditto, manufactured -	153	6	3
Lumber - - -	1,101	3	11½
Different ſtones - -	4,027	4	0½
Furs - - -	297	10	11½
Corn - - -	588	11	6½
Victuals - - -	754	3	1½
Herrings - - -	84,453	1	8
Fiſh - - -	286	9	10½
Cattle - - -	335	5	3½
Sail cloth - - -	4,054	10	11½
Linen - - -	124	1	1½
Allum - - -	9,954	6	0½

	£.	s.	d.
Common aſhes	219	16	8
Pot aſhes	8,282	1	11½
Pitch	32,354	2	1
Pitch oil	129	0	11½
Chalk	4,476	15	3½
Printed books	479	0	10
Guns and piſtols	19	19	9½
Herbs for dying yellow	12	6	8
Different ſorts of cordage	104	5	10
Gunpowder	4	15	11½
Different kinds of furniture	152	0	3½
Beer	298	0	10
Earthen ware	1,099	14	0½
Collothar, or brown red	407	1	3
Fiſh oil	47,546	1	11½
Tar	96,546	18	2½
Saffron	1,743	5	2½
Watches	304	5	7½
Vitriol	52	5	10
New-built ſhips	17,295	15	1½
Baulks	745	15	0
Silks	1,570	6	11½
Different goods	1,280	19	2
Salt	8,799	1	3

Oak

	£.	s.	d.
Oak ſtaves	1,495	15	11½
Wines	3,245	8	4
French brandy	935	0	10
Tobacco leaves	13,299	0	5
Tea	12,494	4	0½
Oil of turpentine	99	16	8
White lead	37	5	10
Cochineal	1,995	14	0½
Pepper	1,145	16	8
Sugar	154	15	3½
Cinnamon	495	5	10
Nutmegs	154	16	11½
Mace	76	10	5
Hemp	174	12	9½
Flax	394	14	0½
Different other merchandizes	40,828	16	6½
Freights for exported goods upon Swediſh bottoms	118,341	18	1½
Total of Exports - £.	1,368,830	13	5

IMPORTS.

IMPORTS.

	£.	s.	d.
Silks - - -	15,528	9	0¼
Cambrick - -	1,598	12	8½
Muſlin - - -	618	6	6¼
Indian cottons - -	4,859	3	0¼
Different ſorts of thread and linen - -	14,449	9	5¼
Printed cottons - -	6	1	4¼
Cloth - - -	23,952	0	0
Camphire - -	249	8	9
Galls - - -	383	11	11¾
Amber - - -	44	11	3
Liquorice - -	587	6	8
Oil (coarſe) - -	9,658	16	1¾
Quickſilver - -	248	14	10½
Turpentine - -	411	7	11
Wax - - -	501	1	8
Tobacco in leaves - -	31,236	6	11¾
Tobacco - - -	14,146	7	4¾
White lead - -	1,198	18	10¼
Braſil wood - -	744	11	0½
Cochineal - - -	2,122	15	5

Fernambuc

	£.	s.	d.
Fernambuc	956	6	9½
Indigo	7,751	11	1
Madder	2,436	7	3½
Cream of tartar	746	17	4½
Colours	13,994	11	8
Anchovies	273	11	1¾
Coffee	29,857	16	4½
Rice	2,184	1	11¾
Paper	6,858	8	6½
Linseed	996	16	6¾
Soap	874	2	1
Divers drugs	26,718	13	6½
Annis	437	4	5¾
Cinnamon	224	19	2
Currants	282	17	8½
Figs	1,254	1	0½
Ginger	993	12	7½
Almonds	2,486	18	0½
Nutmegs	747	8	5½
Mace	961	15	7½
Cloves	224	1	8
Pepper	2,196	11	11¾
Raisins	5,028	14	2
Saffron	396	16	3

'Plumbs

	£.	s.	d.
Plumbs - - -	1,697	16	9½
Different grocery wares -	411	6	10½
Sugar in powder - -	52,807	15	11½
Different ſorts of ſugar -	54,569	0	6½
Peaſe - - -	7,365	16	5½
Wheat - - -	19,728	15	0
Rye - - - -	205,829	4	8½
Corn - - -	34,028	6	11¾
Malt - - -	44,775	7	1
Oats - - -	3,479	6	4¾
Wheat meal - -	40	6	9½
Gruaux - - -	579	1	11¾
Different ſorts of corn -	1,025	17	2¼
Live cattle - -	8,195	3	7¾
Meat - - -	2,198	11	3
Cheeſe - - -	9,778	1	9½
Hams - - -	120	17	11
Salt meat - -	781	16	8
Dry meat - - -	52	13	2¾
Butter - - -	5,217	16	8
Tallow - - -	14,297	6	4½
Fiſh of different ſorts -	8,114	16	0½
Salt and dried fiſh - -	7,354	8	10½
Fruits - - -	2,470	15	8¾

Lead

	£.	s.	d.
Lead	5,004	1	3
Printed books	2,804	0	3¾
Calamine	979	11	11¾
Feathers	217	18	1½
Hair	2,735	0	7½
Potters earth	1,808	15	5
Tin	4,280	6	11¾
Wax candles	819	0	10
Pit coal	5,293	0	5
Different goods	14,981	18	9
French wine	18,546	11	8
Rheniſh wine	1,696	13	1½
Portugueſe and Spaniſh wine	1,998	11	3
Cider and vinegar	737	4	9½
Wines, liquors, &c.	23,399	8	0¼
Silk	24,779	0	10
Cotton	4,299	13	2½
Cotton, thread	3,244	0	10
Ditto, worſted	1,731	1	8
Hides	11,824	0	0
Hemp	57,926	10	5
Flax	29,107	17	7¼
Poliſh wool	19,554	0	3¾
Spaniſh wool	3,029	4	10¾

Sole

	£.	s.	d.
Sole leather - - -	12,327	10	10
Pot aſhes - - -	100	5	7½
Linen thread - - -	2,818	5	11¼
Different rude materials -	18,886	17	7¼
Eaſt India goods conſumed in Sweden -	10,810	2	6
Freight paid to foreign ſhips - -	6,301	0	2½
Total of Imports £.	1,008,392	12	4½

ESTIMATE of the COMMERCE of SWEDEN with the following Countries, in the Year 1781.

	EXPORTS.			IMPORTS.			Balance in Favour of Sweden.			Balance againſt Sweden.		
	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
Denmark and Norway	160,063	11	6¾	66,595	10	11¼	93,468	0	7½			
Dantzic	22,358	3	11½	33,246	3	0¼	—	—		10,887	19	0¾
England	367,292	16	1¾	97,762	4	7	269,530	11	6¾			
France	203,762	18	2¾	83,145	10	2½	120,617	8	0¼			
Holland	107,103	8	10¼	151,583	3	6½	—	—		44,479	14	8¼
Konigſberg and Pruſſia	49,689	2	4¾	67,580	2	4¾	—	—		17,891	0	0
Italy and the Mediterranean	82,166	6	10½	33,170	3	0¼	48,996	3	10¼			
Pomerania (Swediſh)	67,938	18	0¼	187,144	9	8¼	—	—		119,205	11	8
Portugal	125,132	3	1½	40,340	18	11½	84,791	4	2			
Ruſſia and Courland	58,229	12	8½	202,781	4	4½	—	—		144,551	11	8
Spain	23,380	17	8½	14,711	7	4¾	8,669	10	3¾			
Hamburgh, Holſtein, &c.	128,911	7	6	38,202	14	9½	90,708	12	8½			
Weſt Indies	873	8	6½	—	—		873	8	6½			
Eaſt Indies	122	19	4½	10,810	2	6	—	—		10,687	3	1¼

NAVIGATION to and from SWEDEN in the Year 1781.

	Ships loaded.		Entered in Ballaſt.		Ships gone out loaded.	
	Swediſh.	Foreign.	Swediſh.	Foreign.	Swediſh.	Foreign.
Denmark - -	357	18	—	1	368	11
Dantzic - -	141	2	—	—	97	1
England - -	88	87	8	8	235	77
France - -	50	5	—	1	155	4
Holland - -	37	1	—	—	53	1
Konigſberg -	222	5	2	—	151	14
Mediterranean	53	—	—	—	43	
Pomerania -	256	3	—	—	185	7
Portugal - -	142	—	—	—	68	14
Ruſſia - -	509	10	—	—	524	19
Spain - -	10	—	—	—	13	
Germany - -	274	18	—	—	418	25
Weſt Indies -	2	—	—	—	1	
Eaſt Indies -	—	—	—	—	—	1

RECAPITULATION.

	£.	s.	d.
In comparing the exports and imports for 1781, a balance in favour of the former is found, amounting to —	360,437	19	6½
To which is to be added the national gain by the East India commerce — —	61,111	18	10¼
Freights gained in the Mediterranean by Swedish ships, according to the best and most authentic accounts, to —	50,000	0	0
£.	471,549	18	4¾

Silver, gold, and divers foreign coin imported this year — —	111,844	5	11¼

Intereſt,

	£.	s.	d.
Intereſt, proviſion, and brokerage for loans made or renewed abroad, as well as intereſt for the divers ſums which Swediſh merchants owe, and credit given them by foreigners on part of the imports of this year, amount, according to the moſt probable accounts, to —	50,000	0	0
Annual preſents to the powers on the coaſt of Barbary, and other expences relating thereto, as well as appointments and ſalaries of conſuls in thoſe places, and of the Swediſh miniſter at Conſtantinople — —	13,189	18	1½
Smuggling, and frauds in declaring the amount			

	£.	s.	d.
of the merchandizes at the cuſtom-houſe -	125,000	0	0
Balance in favour of Sweden — —	171,515	14	4
£.	471,549	18	4¼

The revenues of Sweden amount to ſomething more than £. 1,000,000 ſterling, but may, on an average, be taken at £. 1,050,000 a year: they have been much augmented ſince the revolution in 1772, as they did not then amount to more than £. 750,000, or at moſt £. 837,500. In this £. 1,000,000 however are not included the rents of land immediately aſſigned for the militia eſtabliſhment and ſailors, and for the pay or ſalary of the governors of provinces, and their officers; theſe rents, levied directly by thoſe to whom they are aſſigned, amount at leaſt to £. 300,000 or £. 350,000.

The

The chief articles of Swediſh revenue are as follow:

	£.	s.	d.
Rents of land — —	146,250	0	0
Capitation — —	56,250	0	0
Duties on export and import — — —	154,166	10	0
Extraordinary taxes granted by the ſtates —	30,416	10	0
The brandy, being a regale — —	41,541	10	0
The poſt office —	19,000	0	0
Stamped paper — —	12,250	0	0
Tythes on corn — —	19,500	0	0
Ditto on iron, copper, ſilver, allum, brimſtone, vitriol, mines, and lime furnaces — —	16,812	10	0
The royal lottery —	17,750	0	0

And above twenty or thirty other ſmaller articles, which amount however to about £. 500,000.

The expences were regulated in 1773

to anſwer exactly the revenues; but they have ever exceeded them, and there is a conſiderable annual deficiency, which has not hitherto been made up otherwiſe than by loans or anticipations, and muſt oblige the king to call the ſtates, in order to find means to extinguiſh that increaſing debt, by any new reſources which may make the revenues more adequate to the expences *.

The average expences amount to 4,753,126 rix-dollars, or £. 1,188,281. 10 s.

The chief articles of expenditure in the year 1784, were,

	£.	s.	d.
1. The king's court, including that of the queen -	78,756	10	0

* The diet of 1788 granted a loan towards liquidating the debt occaſioned by the annual deficiency, gave ſupplies for carrying on the war, and laid on additional taxes; namely, ſix per cent. on houſe rents; eight per cent. on all places from ten rix-dollars, or 2 *l.* 10 *s.* to 100 rix-dollars, or 25 *l.* per ann.; on titles; and three copper dollars, or 10½ *d.* on each window-light.

2. The

	£.	s.	d.
2. The military, viz. the garriſon regiments, the militia not included -	70,336	5	0
3. Ammunition for ditto	26,791	15	0
4. Clothing ditto - -	24,500	0	0
5. The artillery - -	16,548	10	0
6. The navy, the new buildings included -	118,138	10	0
7. The fortreſſes and engineers - - -	19,701	0	0
8. The gallies, &c. being ſeparate from the navy -	25,699	10	0
9. Towards the expences of the king's travels -	50,000	0	0
10. Ships new building, extra - -	35,316	10	0
11. Annual ſum of extraordinaries left to the king's own diſpoſition, according to the form of government - -	25,000	0	0

Amongſt

Amongſt numerous ſmaller articles that make up the reſt of £. 1,188,281. 10 s. the whole of the expences, I note the following:

	£.	s.	d.
1. Drotningholm -	5,129	10	0
2. The prince royal -	2,700	0	0
3. The king's ſtables -	4,755	0	0
4. The prince royal's ſtables - - -	612	5	0
5. Income of prince Charles - -	12,034	0	0
6. Income of prince Frederic Adolphus - -	4,375	0	0
7. The princeſs - -	6,647	0	0
8. The - - -	4,927	0	0
9. The guards - -	11,931	15	0
10. The life dragoons -	6,143	5	0
11. The ſenate - -	14,583	5	0
12. The parliament of Stockholm - -	5,080	5	0
13. Penſions and gratifications - -	7,937	15	0

All

All that has been ſaid hitherto about the finances relates only to Sweden, Finland and Pomerania not included: Pomerania is entirely ſeparated in the accounts and eſtimates, as its expences are to be defrayed from its own revenues; but Finland, though ſeparated from Sweden in the yearly eſtimates, is, however, ſupported by the Swediſh revenues, out of which about £. 12,500 annually make up the deficiency in the Finland revenues: this deficiency ariſes chiefly from the great expences occaſioned by the fortreſs of Sveaborg, the military, and the gallies. The revenues of Finland amount to £. 100,000 per annum, and its expences to £. 112,500; to which muſt be added the rents of land conſigned to pay the militia, governors, &c. which may amount to between £. 25,000 and £. 30,000 ſterling.

RECAPITULATION.

The revenues of Sweden	-	£. 1,050,000
of Finland	- -	100,000
of Pomerania	- -	50,000

The

The rents of lands in Sweden	300,000
in Finland - -	25,000
The total income of the Swediſh revenues amount to - - -	£. 1,525,000

This ſum, in caſe of neceſſity, might be conſiderably augmented, partly by new taxes granted by the ſtates, thoſe now paid being very moderate; partly by free gifts from the bank of Sweden, out of its annual profits, which are conſiderable, but cannot be diſpoſed of without the conſent of the ſtates.

The bank of Stockholm owes its origin to Mr. Palmſhut, a merchant, who carried on a very extenſive trade, and poſſeſſed great property in iron mines. He eſtabliſhed at Stockholm a bank for the purpoſe of exchanging and lending money, divided into two departments for thoſe different purpoſes. As he was the only banker at that time in the kingdom, his correſpondence

ſpondence was very extenſive; and his credit was ſo well ſupported by his private fund, and the profit of his iron works, that the notes which he iſſued at the intereſt of eight per cent. for a term of ten years and upwards, were circulated through the kingdom, and received as ready caſh by the trading part of the nation.

But in proceſs of time, ſeveral counterfeit notes being iſſued, many of his debtors refuſing either to reimburſe the capital or to diſcharge the intereſt, the goods and pawns upon which the money was lent being too numerous to be diſpoſed of to advantage, and the proceedings of the courts of law too dilatory, the bank was drained of caſh, and its credit in danger of ſinking into diſrepute.

In this dilemma Mr. Palmſhut applied to Charles XI. explained the general ſtate of his bank, proved that the fund was by no means deficient, but that unleſs he could recover what was due he ſhould be in danger of becoming bankrupt. He intreated, therefore, the king to take the bank under

his royal direction; and demonſtrated, that by certain regulations the money could be recovered, the accounts ſettled, and the loſſes entirely repaired.

The king approved the propoſal, took the bank under his own protection, and appointed Palmſhut director.

His majeſty having eſtabliſhed the credit and ſecurity of the bank, transferred the direction to the ſtates of the kingdom aſſembled in 1688, declared himſelf and his ſucceſſors protectors of the bank, but renounced all interference or influence in diſpoſing of the money, under any pretext. The ſtates being thus declared guarantees, proprietors, and directors of the bank, ſeveral regulations were made, of which the following were the principal:

That the bank ſhould lend money upon good ſecurity, at the intereſt of eight per cent. and ſhould pay for all money borrowed only ſix per cent.; that the debtors ſhould diſcharge intereſt upon intereſt, but that the bank ſhould not pay intereſt upon intereſt; that all the king's revenues ſhould be

be depoſited in the bank, but without receiving any intereſt. The bank was empowered to iſſue notes not exceeding the value of thirty-ſix dollars copper mint, or 10 *s.*; and it was finally reſolved, that the ſtates, or thoſe whom they ſhould depute, ſhould have the power of inſpecting the accounts, and of inquiring into the nature of its conſtitution. By theſe regulations the credit and riches of the bank increaſed to that degree, that towards the cloſe of the laſt century it became the univerſal depoſitory of the whole kingdom, both as to public and private circulation, and lowered the intereſt from eight to ſeven per cent. and afterwards to ſix, four, and three per cent. In return, the intereſt for all money borrowed, or depoſited in the bank by way of loan, was likewiſe leſſened from ſix to four and an half, three, and two per cent.

The large quantity of copper money then current in the country being by reaſon of its bulk and weight extremely inconvenient, rendered the circulation of bank notes advantageous to trade and commerce.

The

The bank ſupplied Charles the Twelfth with ſuch conſiderable ſums from 1714 to 1717 that the revenues ariſing from the tolls and cuſtoms were inſufficient to pay the intereſt, and there was a conſiderable deficiency.

Theſe ſupplies greatly diminiſhed the public opinion in favour of the bank, and would have undermined its credit, if the king, upon the remonſtrance of the ſtates, had not mortgaged certain revenues of the crown, for the purpoſe of diſcharging the intereſt. His majeſty at the ſame time declared, that all the revenues then mortgaged ſhould remain in the hands of the bank, until the debt ſhould be fully diſcharged; and promiſed, that he would not, on any pretext or emergency, have again recourſe to the bank for money, except for ſuch as belonged to the crown. By this ſtep the credit of the bank was in ſome meaſure retrieved; but its ſtock was too far drained to repair entirely its former credit, until Baron Goertz undeſignedly contributed to it by a ſcheme in every other reſpect detrimental

detrimental to the nation. In order to ſupply Charles with money for his conſtant wars, Goertz hit upon the following deſpotic expedient: He compelled perſons firſt, by means of fines and penalties, and afterwards by a ſpecies of torture, to deliver up their plate, jewels, and coin. In return for theſe effects they received copper currency, called *myntellen*, or ſigns of coins, each weighing only one-third of a ſtyver, but paſſing for a ſilver dollar, or ten pence, of which it was only a 96th part.

The public finding their property thus forcibly torn from them, and receiving no other equivalent than a debaſed currency, which fell ſhort of its nominal value, ſecretly transferred their plate, jewels, and money, to the bank, relying on his majeſty's ſolemn promiſe, that the bank ſhould be exempted from the interference and inſpection of the crown. Baron Goertz, conſidering this mode of proceeding as fraudulent to the crown, endeavoured to prevail upon his majeſty to ſeize the money and

effects depoſited in the bank; but the king not only poſitively refuſed to break his royal word, which he had ſolemnly pledged to his people, but even forbade Goertz from laying before him any propoſals that might tend to the prejudice of the bank.

In this criſis of affairs the bank received ſuch large ſums of money, great part of which, being placed for ſecurity, paid no intereſt, that the profits were very conſiderable. This flouriſhing ſtate of affairs induced the bank, by order of the ſtates, in 1741, to preſent the king with a donative of 100,000 ſilver dollars, or £. 8,333. 4s. and to furniſh him with 500,000, or £. 41,666, without intereſt, towards carrying on the war againſt Ruſſia. Since that period it has frequently advanced large ſums of money to the crown and to the board of manufactures, by order of the ſtates.

The bank is divided into two departments, the one called *Læne* or loan, and the other *Wexel* or exchange bank, each keeping its accounts as ſeparate as if they were

two

two diſtinct eſtabliſhments, but each mutually ſupplying the other as occaſion requires.

The loan bank lends money upon mortgages or pledges in the following manner:—Gold and ſilver in block, copper, braſs, and *lænæ bank ſedlar*, or certificates of having lent money to the bank, being conſidered as nearly the ſame value as ready money, the proprietors, on depoſiting thoſe pledges in the bank, receive the full value, on the payment of three per cent. annual intereſt.

Formerly jewels were received as pledges; but as the bank was once conſiderably defrauded in that article, and on account of their fluctuation in value, they are no longer admitted.

As iron is a principal article in the exports of Sweden, and as the working of the mines is attended with conſiderable expence, and the ſale of the iron uncertain, the bank receives that metal as a proper ſecurity for a loan. The iron being duly appraiſed, and lodged in the public warehouſe, the proprietor receives three-fourths of its value at

the intereſt of three per cent.; and when he can find an opportunity to diſpoſe of his iron, it is again delivered to him, on producing a certificate from the bank that the loan upon it is duly diſcharged.

Mortgaged lands and houſes, being of a leſs certain value, pay an intereſt of four per cent. on the money borrowed; and for the purpoſe of liquidating the debt the following regulations were adopted:

All borrowers upon mortgaged lands and houſes ſhall pay ſix per cent. yearly: of this ſum four per cent. is the lawful intereſt; and the remaining two per cent. is annually deducted from the capital; by which means the original debt is annually diminiſhing.

The *Wexel* or exchange bank exchanges and iſſues bank notes, diſcounts bills, receives and aſſigns the money depoſited for intereſt or ſecurity, and diſcharges the intereſt of two per cent. on all money placed in their hands.

Towards the latter end of the reign of Adolphus Frederic, the bank notes were iſſued

iſſued in ſuch large numbers, and many of them at ſo low a value as 1 *s.* 6*d.* that ſcarcely any ſpecie was left in the kingdom; the bank was ſo drained of caſh as not to be able to exchange its notes but in copper money, and paper was almoſt the only currency.

For the purpoſe therefore of preventing a total bankruptcy, with which the nation was threatened, and calling in and paying the paper currency, the ſtates in 1766 voted a loan of 3,000,000 rix-dollars, or £. 750,000, to effect the realization of the bank notes, and to circulate a ſufficient quantity of ſpecie.

As a farther ſecurity againſt the encroachments of the crown, a former regulation was confirmed, that the bank ſhould annually advance to the king £. 250,000 for the revenues of the current year, and ſhould repay itſelf from the revenues of the ſubſequent year; but that no more money ſhould be lent to the crown under any pretence whatſoever.

Many ſchemes calculated to reſtore the credit of the bank being counteracted by party, the diet in 1772 configned to the king the difficult province of realizing the bank notes, and reforming the currency, which his majeſty happily effected.

In 1777 and 1779 the ſtates confirmed the realization effected by the king, and made ſeveral new regulations in relation to the bank, which tended to ſecure its credit, and rendered it ſtill farther independent of the crown.

The principal regulations were as follows: That only £.250,000 ſhould be annually lent on eſtates, above what was already advanced; that the eſtates already mortgaged ſhould, on failure of the payment of one year's intereſt at the appointed time, be immediately ſold by auction, the debt to the bank diſcharged, and the remainder paid to the proprietors; that the loan on the mortgaged eſtates ſhould not be continued when the ſaid eſtates were ſold or tranſferred without the conſent of the bank;

and

and that on the ſucceſſion or transfer of ſuch eſtates two per cent. of the mortgaged property ſhould be paid to the bank.

The independence of the bank on the crown was ſtill farther eſtabliſhed by the diet of 1784, which ſettled the following regulations:

A committee of reviſors was appointed for the purpoſe of ſuperintending and inſpecting the accounts. This committee conſiſts of a certain number of perſons choſen by the three houſes of nobles, clergy, and burghers, from their reſpective orders, who continue in office till the meeting of a new diet, when they are either renewed or confirmed. They aſſemble once every three years, and continue ſitting not more than a month. They inſpect the general ſtate of the bank, compare the accounts of the directors, and obſerve that no abuſes have been committed, and that the regulations of the ſtates have been followed.

But as by the new conſtitution the calling of the ſtates entirely depends upon the

will of the king, and as a great length of time might elapſe in the intervals of the diet, it was carefully provided, that the crown ſhould not have the ſmalleſt part in the appointment of a vacant reviſor's place. The mode of election is as follows:

Of the nobles the vacant place is filled by the remaining noble reviſors, and by certain deputies nominated by the houſe of nobles at the diet, who continue electors until the meeting of the next diet.

On a vacancy among the eccleſiaſtical reviſors, the clergy of Stockholm notify the vacancy to the conſiſtories in each province, and appoint the day of election. The new reviſor is choſen by the majority of the ſeveral conſiſtories.

On a vacancy among the reviſors of the order of burghers, the magiſtrates of Stockholm notify in the ſame manner the vacancy and day of election to all the borough towns; which likewiſe chooſe the new reviſor either by deputies or letters.

CHAP.

CHAP. IV.

Palace of Gripſholm—Stræg̃netz—Tombs of Steno Sture, and Charles the Ninth—Trolhætta—Bohus—Gotheborg—Herring Fiſhery—Marſtrand—Uddevalla.

THE palace of Gripſholm was a monaſtery of Carthuſians, given to that order by Steno Sture; but as the friars refuſed an aſylum to Guſtavus Vaſa in his diſtreſs, the latter claimed it as the patrimony of his family, and made it the favourite place of his reſidence. The preſent king, being enamoured of a place which was honoured with the preſence of his great anceſtor, has lately improved and furniſhed it, and uſually paſſes here ſome months in the year.

The palace is a Gothic building, and ſtands on a ſmall iſland of the Maeler, overlooking

or

or rather impending over the water. Its antient battlements, and four irregular round towers covered with copper, convey an idea of thoſe antient caſtles mentioned in romances; and the recollection, that it was the favourite reſidence of Guſtavus Vaſa, impreſſed us with additional awe and reverence.

This palace contains a curious collection of portraits: Amongſt others I particularly noticed Chriſtopher the Third; Margaret, the Semiramis of the North; and Eric of Pomerania; Steno Sture, junior, adminiſtrator of Sweden; ſeveral portraits of Guſtavus Vaſa, particularly one painted by his ſon, the unfortunate and accompliſhed Eric the Fourteenth; the treacherous Arnold Peterſon, who received and endeavoured to betray Guſtavus Vaſa, and his wife, who preſerved him; Catharine, the beloved conſort of Eric the Fourteenth, pale and delicate; Guſtavus, ſon of Eric the Fourteenth, who died in Ruſſia; he is repreſented in chains, and his countenance conveys a fine expreſſion of melancholy; John the Third; Charles

the

the Ninth; and Oxenſtiern, the celebrated chancellor.

A large hall contains thirty-four whole length portraits of the European ſovereigns contemporary with Guſtavus Vaſa. Among the moſt conſpicuous I remarked the emperor Maximilian the Firſt; Sigiſmond the Firſt, king of Poland; the emperor Charles the Fifth, and his brother Ferdinand; Louis, king of Hungary; our Elizabeth, in the bloom of her youth, and much prettier than ſhe is uſually repreſented; and Eric the Fourteenth, painted by himſelf.

The new ſaloon is hung with portraits of the preſent ſovereigns of Europe.

We were ſhewn a ſmall apartment, in which John the Third was confined ten years by his brother Eric, and in which Eric alſo was afterwards impriſoned by order of John.

The king has built an elegant theatre, in which plays are occaſionally repreſented during his reſidence in this ſpot.

Strægnetz, fourteen miles from Gripſholm, is a ſmall town on the banks of the

Maeler. That lake never appears a large expanſe of water, but is divided into numerous bays or inlets, which ſeem like ſo many detached lakes. Its ſurface is interſperſed with rocky iſlands, and its perpendicular banks are covered to the water's edge with hanging groves; but the eye is tired with the tedious uniformity of the firs and pines, which form almoſt the only trees that fringe its banks, or overſpread its iſlands.

The cathedral, a large red brick building, with a ſquare tower roofed with copper, contains the ſepulchres of the adminiſtrator Steno Sture the elder, and of Charles the Ninth.

The ſepulchre of Steno Sture is a ſarcophagus of marble, ornamented with a ſword, helmet, and buckler.

His body was formerly buried in the monaſtery of Gripſholm: when that monaſtery was aboliſhed, at the introduction of the proteſtant religion, it was removed to the pariſh church of Kermbo, and in 1577 conveyed in ſtate to this cathedral, by order of Charles the Ninth, then duke of Sudermanland.

Time

Time had mouldered his tomb, and his remains were not diſtinguiſhed by any memorial, until the ſepulchre which now covers his aſhes was erected by the preſent king. His majeſty conſidered it as a national reproach, that no tomb or inſcription ſhould be erected in honour of a man, who, in the capacity of adminiſtrator, directed the helm of ſtate during thirty turbulent years, and ſupported the rights of his countrymen againſt the repeated invaſions of the Danes; who gave to his country equal laws; and, no leſs eminent for his protection of letters, founded the univerſity of Upſala.

The tomb of Charles the Ninth ſtands near the altar, on it is the equeſtrian figure of the king in complete amour, the ſame which he is ſaid to have worn in his lifetime.

Although the tranſcendent merits of Charles the Ninth are eclipſed by the ſuperior qualities of his father and ſon, yet, even as the ſon of Guſtavus Vaſa, and father of Guſtavus Adolphus, he ſeems to ſhine no leſs with native than with reflected luſtre.

Compelled

Compelled from neceſſity to take up arms in conjunction with John, and to aſſiſt in depoſing Eric the Fourteenth, yet he behaved to his unfortunate brother with humanity and deference, oppoſed and condemned his aſſaſſination, and openly remonſtrated againſt the indignity offered to his remains.

The life of Charles the Ninth was almoſt a continued ſtruggle againſt civil commotions and foreign invaſions; yet amidſt thoſe foreign and domeſtic troubles his whole adminiſtration was reſpected at home and abroad. He had long been the real, while Sigiſmond, who chiefly reſided in Poland, was the nominal, ſovereign; until the unanimous voice of the nation depoſed the weak and bigotted Sigiſmond, and raiſed Charles to the throne of Sweden; a meaſure ſo well conducted as not to appear effected by his own private intrigues, but rather the reſult of national affection and national neceſſity.

Charles, in his conduct as king, fully anſwered the ſanguine expectations of his peo-

ple. He was enterprifing, yet cautious in war, fagacious and decifive in the cabinet, a friend to humanity, yet fevere in the punifhment of crimes. Attached by principle to the proteftant religion, he fupported with firmnefs its declining caufe, againft the perfecutions of John and Sigifmond, and raifed it, almoft drooping, again to pre-eminence.

Zealous to promote the intereſts of his people, he built towns, encouraged commerce and agriculture, and patronized letters. Of quick and lively feelings, he was fubject to violent but fhort tranfports of paffion, which harraffed his frame, and finally occafioned his death. He died in 1611, in the fixty-firft year of his age, leaving the commerce, finances, and army, in the moft flourifhing ftate, and, a moft invaluable legacy to his country, his fon Guftavus Adolphus.

From Strægnetz I paffed through Orebro, Arboga, Lidkioping, Trolhætta, and Gotheborg, of which places I have already given a curfory account *.

* See Book VII. c. ix. and x.

I found

I found the works at Trolhætta very little advanced ſince my former viſit to this place, in March 1779. A new plan is formed for cutting the intended canal through the precipitous rock of granite which forms the banks of the Gotha; a plan more practicable and leſs expenſive than the former, for the loweſt depth of rock to be excavated is twenty feet; but a large dam is to be made 120 feet high, and 20 thick. Of this projected canal only a ſquare of about ſixty feet had been executed.

The deficiency of Polheim's original plan, in attempting to make the ſluices near the channel of the Gotha, was experienced laſt year; for the dam which ſtopped the water above Ekerbrad cut was overthrown by the violence of the river, and the waters burſt through the cuts of Ekerbrad and Polheim, and would have deſtroyed the ſluices if they had been conſtructed.

From Trolhætta we ſailed down the river Gotha, paſſed through the ſluice at Aker, and diſembarked at the ſluice of Edit, which was ſo nearly completed, that the navigation

from

from the Wenner to Gotheborg may now be conſidered as uninterrupted.

Having examined the ſluice of Edit, we croſſed the Gotha, diſembarked at a ſmall village, and continued along the weſtern ſhore of the Gotha, through a very wild and rocky country, interſected with vallies of corn and paſture. We paſſed through Kongſhall, now a ſmall village, conſiſting of one ſtreet of wooden cottages, at the bottom of a ridge of barren rock, formerly ſaid to have been the reſidence of the antient dukes or kings of Norway.

We ſtopped at Bohus to examine the fort of that name, ſtanding on a rocky eminence in the Iſle of Bohus, encircled by two branches of the Gotha. This fort was formerly celebrated in the hiſtory of Norway, as a place of conſiderable ſtrength, and forming the frontier fortreſs between Sweden and Norway, during the conſtant wars in which the Danes and Swedes were engaged.

It was a wooden fortreſs before the invention of gunpowder, but in 1448 was re-

built with ſtone by Chriſtian the Firſt. Its ſituation is very ſtrong: it contains a garriſon of a hundred men. From its ſummit we commanded a view of the Gotha winding at the feet of the moſt barren rocks.

During the few days which I paſſed at Gotheborg, in my ſecond excurſion to Sweden, I obtained the following information concerning the herring fiſhery, which forms a very important part of the trade carried on at Gotheborg, and has been the occaſion of conſiderably increaſing the population of the town.

The herrings frequent theſe coaſts of Sweden in the month of November, when the fiſhery begins, and though it continues ſcarcely three weeks, yet ſupplies during that ſhort ſpace to the fiſhermen of Gotheborg about 600,000 barrels.

As the coaſts in theſe parts are extremely rocky, and the ſea is ſprinkled with innumerable iſlands, the way of catching the herrings is as follows: Eight boats, manned each with two or three fiſhermen, draw one large net, encloſing a ſhoal of herrings, into

into a creek or ſmall bay, and the fiſh are ſhovelled on the ſhore into conſiderable heaps. Of the 600,000 barrels caught in this manner 200,000 are ſalted, and from the remainder train oil is extracted. Fifteen barrels of herrings yield one of oil, which is principally exported to Holland and Spain.

A barrel of herrings ſells, upon an average, for 1 *s.* 3*d.* and when ſalted from 8 *s.* to 10 *s.* Theſe fiſh are not ſo fine as thoſe caught and cured by the Dutch, but being much cheaper, are preferred by the Ruſſians and Poles. The ſalt is procured from Spain; and one barrel of ſalt cures three barrels of herrings. Upon an average we may eſtimate the exportation of ſalted herrings at 150,000 barrels, and the inland conſumption of Sweden at 50,000.

The fortifications of Gotheborg are ſo weak, and its garriſon in general ſo ſmall, that in 1788 it muſt have fallen into the hands of the Danes, who, under the pretence of an alliance with Ruſſia, attacked the Swedes, and marched from Norway to the gates of Gotheborg, if the foreign powers had not interfered.

The king of Sweden hurried from Dalecarlia, where he was animating the natives to arm in his defence, to Carlſtadt. There he was met by Mr. Elliot, the Engliſh miniſter at the court of Denmark. Guſtavus having accepted the mediation of England, Pruſſia, and the Hague, Mr. Elliot undertook to ſtop the further progreſs of the Daniſh army; an event which he fortunately accompliſhed at the very inſtant the Daniſh troops were taking poſſeſſion of Bohus, and were within a few hours march of Gotheborg. Mean while the king repaired to Gotheborg, arrived at the gates ſo unexpectedly, and at ſo late an hour, that he had the greateſt difficulty in gaining admiſſion; and the Daniſh herald, who the next morning ſummoned the town to ſurrender, was ſurpriſed on being introduced to the king, and informed by his majeſty, that the citizens would defend their ramparts to the laſt extremity. But neither the preſence or courage of Guſtavus, who infuſed new ſpirit into the inhabitants, could have ſaved Gotheborg, if the Engliſh miniſter had not ſtopped the progreſs of the Daniſh army. The firſt armiſtice,

armiſtice, concluded under the mediation and guarantee of the Engliſh miniſter, was only for eight days, but was afterwards prolonged for a month, when he ſigned the final convention at Uddevalla for the evacuation of Sweden. The prince of Heſſe retreated into Norway; Gotheborg was ſaved from pillage, Sweden from diſmemberment, and Europe from a general war.

This ſucceſsful event, obtained without expence of blood and treaſure, was the prelude to ſtill more important negociations, by which the neutrality of Denmark was eſtabliſhed, and the king of Sweden left to make thoſe vigorous and aſtoniſhing efforts to ſupport the independence of his own crown, and to reſtore the balance of power in the north.

From Gotheborg we made an excurſion to Marſtrand, a ſmall iſland in the Cattegate, which for its ſtrength is called the Gibraltar of Sweden, and which, being declared a free port during the late general war, was remarkable as being the place of reſort for the American veſſels.

Having changed horſes at Kongſhall, we proceeded through a rocky country to Kiul-

thal, a ſingle houſe, inhabited by a cuſtom-houſe officer, where we embarked, and rowing through ſmall bays and creeks, amid barren rocks and crags, we arrived in two hours at Marſtrand, one of the moſt extreme of thoſe cluſters of iſlands which extend in ſuch numbers from the coaſts of Sweden.

Marſtrand is a rocky iſland, about two miles in circumference; the town, which lies on the eaſtern ſide, contains about 160 houſes, and about 1,200 inhabitants. It was declared a free port in 1776, and was the great reſort for the American veſſels trading to theſe parts, who were not permitted to enter into any other port of Sweden. The traffic carried on by theſe means enriched the town, particularly in 1780 and 1781. Since the peace the commerce has greatly diminiſhed, and the inhabitants now chiefly ſubſiſt by the herring fiſhery, by the number of ſhips which in bad weather take refuge in the harbour, and by a contraband trade.

Previous to 1781 the inhabitants obtained conſiderable profits by ſmuggling brandy into Sweden, the importation of which was entirely prohibited in the other ports; but as the ſame privilege of importing foreign

ſpirits

ſpirits for the purpoſe of exportation has been lately granted to Gotheborg, Marſtrand has loſt great part of its contraband trade.

Marſtrand is called a *free port*, but its exemption is merely imaginary; for although all goods are admitted into the town free of duty, yet they cannot be exported from thence without paying the uſual cuſtoms. Above ſixty cuſtom-houſe officers are eſtabliſhed, and carefully examine all veſſels at the time of their departure: we underwent a very ſtrict ſearch.

The harbour is extremely ſecure and commodious, but of difficult entrance, and in tempeſtuous weather dangerous, without a pilot of the place. It is capable of containing 200 veſſels, and of ſufficient depth for the largeſt.

Each of the two entrances which lead into the harbour are commanded by two new batteries. That on the north ſide, which is quite finiſhed, mounts 10 guns of 24 and 36 pounders, and could contain in time of war a garriſon of 150 men. The

ſouth battery, which was not yet mounted, will be capable of containing 300 ſoldiers. The place is ſtill further fortified by the ſtrong citadel of Carlſtein, which ſtands on an eminence in the middle of the iſland. It was built in 1682, by Charles the Eleventh, and was taken by the Danes in 1719; but its fortifications have lately been ſo conſiderably ſtrengthened, that it is now deemed impregnable. On the top of the higheſt tower is a light-houſe, from which I commanded a moſt extenſive view of the Cattegate, ſprinkled in the adjacent parts with ſo many rocks and iſlands as ſurprized me from their aſtoniſhing number—

" Thick as th' autumnal leaves that ſtrew the
" vale
" Of Valombroſa *."

The numerous rocks and ſhoals render this ſea ſo extremely dangerous, that, according to an accurate computation, above 300 veſſels annually take refuge during ſtreſs

* Milton.

of

of weather in the harbour of Marſtrand. It was a pleaſing reflection to ſee theſe rocks covered with the huts of fiſhermen, and to conſider, that the induſtry of man had rendered ſuch barren ſpots the nurſeries of many families by the profits of the herring fiſhery.

Having gratified our curioſity at Marſtrand, we embarked, and returned to Kiulthal, from whence we continued our journey through a country ſo exceedingly rocky and barren, that if I had not obſerved occaſional ſlips of corn and paſture in the ſmall vallies, I ſhould have concluded, that the ſea had only left it yeſterday. As I advanced towards Uddevalla the lands became gradually more and more fertile, yielding rye, barley, and oats, ſprinkled with foreſts of fir, and watered by ſeveral lakes. As we paſſed theſe pieces of water in the duſk of the evening, we obſerved ſeveral boats hanging out lights in order to allure the fiſh into nets.

Uddevalla is prettily ſituated on a bay of the ſea, and at the bottom of ſome ſteep

rocks

rocks at the extremity of a ſmall but fruitful valley. The houſes are built of wood painted red and yellow; the ſtreets are ſpacious and airy. It contains about 3,000 inhabitants, and carries on a tolerable commerce, exporting iron, planks, and herrings.

As we proceeded in our journey northward from Uddevalla, the hills increaſed in height; the vallies became more confined, and leſs fruitful; the rocks more rugged; and the few pines that relieved the eye leſs tall and luxuriant.

CHAP.

CHAP. V.

General Remarks on Norway—Hiſtory—Geography—Benefits of the Norway Law—Peaſants—Climate.

ABOUT a day's journey from Uddevalla we arrived at the frontiers of Norway. But before I proceed in my journal, I ſhall, in this chapter, throw together a few general obſervations on the hiſtory, geography, climate, and productions of Norway, a country, though extremely intereſting, yet ſeldom viſited by travellers.

Norway was formerly an independent kingdom, governed by its own hereditary ſovereigns. On the demiſe of Hagen the Fifth, in 1319, without male iſſue, his grandſon in the female line, Magnus Smek, united in his perſon the kingdoms of Sweden and Norway. Magnus was ſucceeded

ceeded in the kingdom of Norway by his ſon Hagen the Sixth, huſband of the celebrated Margaret; and at his deceaſe, in 1380, Norway was united to Denmark by their ſon Olof the Fifth; who dying without iſſue, Margaret herſelf was raiſed to the throne by the unanimous ſuffrages of the nation. On her death it deſcended, with Denmark and Sweden, to her nephew Eric of Pomerania.

Sweden was afterwards ſeparated from Denmark by the valour and addreſs of Guſtavus Vaſa; but Norway has continued inviolably united to the crown of Denmark.

Norway is formed by nature into two great diviſions, Northern, and Southern or Proper Norway, ſeparated from each other by the ſmall Swediſh province of Herndahl.

Northern Norway is a long and narrow ſlip of land, extending as far as North Cape, beyond the ſeventy-firſt degree of north latitude, the moſt northern point of Europe, and bounded to the weſt and ſouth

by the northern ocean, and by Swediſh and Ruſſian Lapland. It is divided into Nordland and Finnmark, and comprehended in the government of Drontheim.

Southern, or Norway Proper, of which a map is prefixed to this chapter, is bounded to the north and eaſt by Sweden, and to the weſt and ſouth by the northern ocean. It is divided into four governments, Aggerhuus or Chriſtiania, Chriſtianſand, Berghen, and Drontheim.

Although Norway comprehends a large tract of territory, yet from its rocky ſoil and northern poſition its population is by no means adequate to its extent. Perhaps the following tables, giving the number of births and deaths during ſeven years, may aſſiſt us in forming a probable ſtatement of the population of Norway.

	Births.	Deaths.
1777 —	23,331 —	15,655
1778 —	23,487 —	15,222
1779 —	23,862 —	20,768
1780 —	24,711 —	18,523

	Births.	Deaths.
1781 —	24,153 —	16,072
1782 —	23,944 —	17,503
1783 —	21,554 —	19,357
Sum total	165,042	123,100

By dividing 165,042, the ſum total of births during the ſeven years, by ſeven, we have 23,577 for the annual average number of births; and by dividing 123,100, the ſum total of deaths, by the ſame number, we have 17,585 for the annual average number of deaths. If, upon a ſuppoſition that in the whole kingdom one in 35 dies annually, we multiply 17,585, the annual number of deaths, by 35, we have 615,475 for the population of Norway. Or, if we multiply 23,577, the annual number of births, by 30, the uſual mode * of calculation, we have 707,310; and by allowing for omiſſions, we cannot

* See Dr. Price on Annuities.

eſtimate

eſtimate the probable population of all Norway at more than 750,000 ſouls.

The Norwegians, being the ſame race with the Danes, and ſo long connected with them in religion and government, ſpeak the ſame language, with a neceſſary mixture of provincial expreſſions. Wilſe *, a native of Norway, informs us, that the gentry and inhabitants of the principal towns, allowing for a few provincial expreſſions, ſpeak purer Daniſh than is uſual even in Denmark, not excepting Copenhagen; that the inhabitants of the eaſtern confines bordering on Sweden naturally blend many Swediſh words; that throughout the whole country the general accent and cadence is more analogous to the Swediſh † than to the Daniſh pronunciation; and that the inhabitants on the weſtern coaſts, who have a more conſtant commu-

* Wilſe's Reiſe, p. 28.

† The Swediſh and Daniſh languages are both dialects of the Teutonic or German, and are both ſpoken in a ſinging or chanting tone. The Swedes have a more varied and lively pronunciation.

nication

nication with the Danes, partake leſs of this peculiarity.

The Norwegians maintain their own army, which conſiſts of 24,000 infantry, and 6,000 cavalry. The troops are much eſteemed for their bravery, and, like the Swiſs mountaineers, exceedingly attached to their country.

The horſes which ſupply their cavalry are ſmall, but ſtrong, active, and hardy.

Every peaſant (thoſe excepted who inhabit the coaſts, and are claſſed as ſailors) not born in a town, or upon ſome noble eſtate, is by birth a ſoldier, and enrolled for ſervice at the age of ſixteen. From that year until he has attained the age of 26, he is claſſed in the young militia. At 26 he enters into the old militia, and continues to ſerve till 36, at which period he receives his diſcharge. The militia take the field every year in the month of June, and remain encamped about a month.

Norway is bleſſed with a particular code, called the *Norway Law*, compiled by Grieffelfeld, at the command of Chriſtian the Fifth,

Fifth, the great legiſlator of his country. By this law, the palladium of Norway, the peaſants are free, a few only excepted on certain noble eſtates near Frederickſtadt. But the virtue of this law extends itſelf even to thoſe ſerfs, for no proprietor can have more than one of theſe privileged eſtates; and unleſs he poſſeſſes a title or certain rank, and reſides on his eſtate, he loſes his privilege, and the peaſants are free.

The benefits of the Norway Code are ſo viſible in its general effects on the happineſs and in the appearance of the peaſants, that a traveller muſt be blind who does not inſtantly perceive the difference between the free peaſants of Norway and the enſlaved vaſſals of Denmark, though both living under the ſame government.

Many of the peaſants pretend to be deſcended from the antient nobles, and ſome even from the royal line: they greatly pride themſelves upon this ſuppoſed deſcent, and are careful not to give their children in marriage but to their equals in birth and blood.

A curious cuſtom prevails in Norway, called *odels right*, or right of inheritance, by which the proprietor of certain freehold eſtates may re-purchaſe his eſtate, which either he or any of his anceſtors have ſold, provided he can prove the title of his family. But in order to enforce this claim, his anceſtors, or he, muſt have declared every tenth year, at the ſeſſions, that they lay claim to the eſtate, but that they want money to redeem it; and if he, or his heirs, are able to obtain a ſufficient ſum, then the poſſeſſor muſt, on receiving the money, give up the eſtate to the *odels-man*. For this reaſon, the peaſants who are freeholders keep a ſtrict account of their pedigree. This cuſtom is attended with advantages and diſadvantages. As to the advantages, it fixes the affections of the peaſant on his native place, and he improves with pleaſure thoſe poſſeſſions which are ſo ſtrongly ſecured to him: it increaſes the conſequence and excites the induſtry of his family. On the contrary, the eſtate loſes its value when ſold to another perſon, becauſe, as he poſſeſſes only

only a precarious eſtate, which he may be obliged to reſign, he is not inclined to improve the lands, as if they were irrecoverably his own.

The Norwegian peaſants poſſeſs much ſpirit and fire in their manner, are frank, open, and undaunted, yet not inſolent; never fawning to their ſuperiors, yet paying proper reſpect to thoſe above them.

Their principal mode of ſalute is by offering their hand; and when we gave them or paid them a trifle, the peaſants, inſtead of returning thanks by words or by a bow, ſhook our hands with great frankneſs and cordiality.

The peaſants of Norway are well clothed and well lodged, and appear to poſſeſs more comforts and conveniences of life than any which I have ſeen in the courſe of my travels, excepting in ſome parts of Switzerland.

They weave their ordinary cloth and linen; they make alſo a kind of ſtuff like a Scotch plaid. The cloth which the men uſe for their coats is principally of a ſtone colour,

with red button-holes, and white metal buttons.

The women, while employed in their houſehold affairs, frequently, as in Sweden, appear only with a petticoat and a ſhift, with a collar reaching to the throat, and a black ſaſh tied round the waiſt. Their linen is remarkably fine; and as they are uſually well made, this mode of dreſs ſets off their ſhapes to the higheſt advantage.

The common food of the peaſant is milk, cheeſe, dried or ſalted fiſh, and ſometimes, but rarely, fleſh or dried meat, oatbread called *flad-brod*, baked in ſmall cakes about the ſize and thickneſs of a pancake; it is uſually made twice a year. I obſerved a woman employed in preparing it: having placed over the fire a round iron plate, ſhe took a handful of dough, and rolled it out with a rolling-pin to the ſize of the iron plate; ſhe then placed it on the plate, and baked it on one ſide, then turned it on the other with a ſmall ſtick. In this manner ſhe baked an aſtoniſhing number in leſs than a quarter of an hour; and I was informed

formed that one woman, in one day, can bake ſufficient for the family during a whole year. The peaſants alſo, in times of ſcarcity, mix the bark of trees, uſually of the fir-tree, with their oatmeal; then dry this bark before the fire, grind it to powder, mix it with ſome oatmeal, then bake it, and eat it like bread: it is bitteriſh, and affords but little nouriſhment.

As a luxury, the peaſants eat *ſharke*, or thin *ſlices* of meat, ſprinkled with ſalt, and dried in the wind, like hung beef; alſo a ſoup made like a haſty-pudding, of oatmeal or barley-meal; and in order to render it more palatable, they put in it a pickled herring or ſalted mackerel.

The uſe of potatoes has been lately introduced, but thoſe roots do not grow to any ſize in a country where the ſummer is ſo ſhort.

Fabricius ſtrongly recommends, in times of ſcarcity, the moſſes and lichens, and particularly the *lichen iſlandicus*, which yields a very nouriſhing ſuſtenance, and is commonly uſed for food in Iceland.

According to a ſeries of meteorological obſervations taken by Mr. Wilſe, paſtor of Sydeborg, it ſnows moſt in December and in the middle of January. It rains moſt in April, October, and Auguſt. The cleareſt weather is from the middle of June to the middle of July, and during the whole month of March. Winds are moſt violent in the middle and latter end of April, May, and October. The ſtilleſt ſeaſon is in January; from the tenth of June to the eleventh of July, and in the middle of Auguſt, a circumſtance very profitable to the oat harveſt, which of all corn is more eaſily ſubject to caſt its ripe grain in windy weather. If we compare the climate of Norway with the climate of London, March at London is like April and the beginning of May in Norway; and the March of Norway is our January. On account of the frequent ſpring froſts ſeeds ought not to be ſown in gardens before the twentieth of May; and the froſts of the latter end of Auguſt are no leſs detrimental.

The heat and cold varies ſo much in Norway,

way, that in June or July, the mercury in Fahrenheit's thermometer, as obſerved by Mr. Wilſe at Sydeborg, near Frederickſhall, not unuſually riſes to 88, and on the firſt of January 1782, fell to—22, or 54 degrees below the freezing point. At Eger, according to profeſſor Stroem's obſervations, it fell on that ſame day to—36 ½; and at Kongſberg to—40, or 72 below freezing point, a degree of cold by which quickſilver is congeled. This extreme riſe and fall of the quickſilver makes a difference of 110 degrees between the greateſt heat and greateſt cold at the ſame place; a difference much more conſiderable than is obſerved at Upſala or Stockholm, which lie nearly in the ſame latitude as Sydeborg.

In ſome places vegetation is ſo quick, that the corn is ſown and cut in ſix or ſeven weeks.

Tillage cannot generally be very flouriſhing in a country, which is in many parts ſo rocky as to defy the plough; where the climate is ſo ſevere that the hoar-froſts begin in September, and where the cold in

the highlands prevents the maturity of the corn. It is true, indeed, that the ſmall vallies, and the intervals between the rocks, are uſually provided with a fruitful ſoil, and that the induſtry of the peaſants covers the naked rocks and the ſandy grounds with a new earth; yet the arable grounds are few, and no parts of Norway yield ſufficient corn for interior conſumption, the diſtricts of Hedemark, Toten, and Ringerike, excepted.

This deficiency is occaſioned by the nature of the climate and ſoil. In ſpring, and in the firſt ſummer months, the drought and heat are frequently ſo intolerable, and the vegetable mould ſo thin, that the roots of the corn and graſs are burned up, if a few days of ſunſhine ſucceed each other without rain. Alſo the greateſt part of the ſoil is ſo much blended with ſand, that too much rain cannot fall in ſpring and ſummer. In autumn, on the contrary, the decreaſed warmth, and the great quantity of rain, prevents the corn from ripening, and it is frequently cut green. Not unuſually, when a favourable ſeaſon has ripened the

corn,

corn, the frequent and violent autumnal rains hinder the carrying of it in until it is almoſt ſpoiled. Alſo the ſmall quantity of arable land ſeldom lies fallow, but is ſowed every year, and therefore requires more manure than can be uſually procured.

All theſe circumſtances ſo much counteract the induſtry of the Norwegian farmers, that even in the moſt favourable ſeaſons a conſiderable importation of corn is annually neceſſary; and in unfavourable harveſts the utmoſt dearth is experienced in all the inland parts, as the tranſport of the corn from the ſea coaſts is highly expenſive.

In order to dry the corn expoſed to the heavy rains, the peaſants fix forked poles, about ten feet high, place rows of other poles tranſverſely, on which they file the ſheaves, the lowermoſt row hanging about two feet from the ground. They are alſo frequently obliged to bake the corn in wooden ſheds, heated by means of ſtoves.

As Norway, therefore, does not produce ſufficient corn for its own conſumption, Denmark enjoys the excluſive privilege of

ſupplying with grain that part called Sudenfields, comprehending the two governments of Aggerhuus and Chriſtianſand. This monopoly frequently occaſions a ſcarcity of corn; but though ſometimes attended with great inconveniences and occaſional diſtreſs, yet will not be aboliſhed without great difficulty, becauſe the Daniſh nobles, who are always at the head of affairs, find their intereſt in its continuance.

But Norway, however deficient in arable land, is exceedingly rich in paſture, and conſequently produces much cattle. The mode of keeping the cows is ſimilar to that practiſed in the mountains of Switzerland. About the middle of May they are driven to the meadows; towards the middle of June are ſent to paſture on the heights, or in the midſt of the foreſts, where they continue till autumn. The cows are uſually tended by a woman, who inhabits a ſmall hut, milks them twice a day, and makes butter and cheeſe on the ſpot. On their return the cattle are paſtured in the meadows, until the ſnow ſets in about the middle of October, when

when they are removed to the ſtables, and fed during winter with four-fifths of ſtraw, and one-fifth of hay. The horſes are uſually foddered with hay during winter, and are ſeldom paſtured before the beginning of June. In ſome places the cattle are fed alſo with ſalted fiſh.

Agriculture has been of late years greatly improved in theſe parts, and the landed eſtates are increaſed within theſe laſt fifty years near one-third in their value. This improvement is conſiderably owing to the labours and encouragement of the patriotic ſociety, which gives premiums for the beſt improvements and inſtructions in every part of farming.

The fiſheries, particularly on the weſtern coaſt, furniſh employment and wealth to the natives, and are the means of ſupplying the fineſt ſailors for manning the Daniſh fleet in times of war.

The principal fiſh, which, dried and ſalted, furniſh ſo conſiderable an article of exportation, are the cod, the ling, and the whiting: their livers, beſides, yield train oil,

and

and the ſmalleſt are given as winter fodder to the cattle.

The herring fiſhery is not ſo profitable as formerly, as theſe fiſh, which uſed to frequent the coaſts of Norway, in their progreſs from the North Pole, now keep at a greater diſtance from theſe ſhores, and firſt approach the rocks of Marſtrand and Stroemſtrand, which has transferred to the Swedes the principal herring fiſhery in theſe parts, though ſtill ſufficient profit accrues to thoſe enterpriſing fiſhermen who venture further from the coaſts.

The ſalmon are taken partly in the bays, and partly in the rivers, the ſtreams of which they aſcend for the purpoſe of ſpawning in ſpring. This is the moſt coſtly fiſh in theſe parts, and is cured by ſalting and ſmoking.

Mackerel might alſo be taken in much larger quantities, if many of the Norwegians were not prejudiced againſt eating them, from a ſtrange notion, that ſhoals of mackerel often attack and devour the human ſpecies, when bathing in the ſea.

The extenſive foreſts of Norway, which furniſh

furniſh ſuch riches to the proprietors, and ſo much employment to the natives, are applied to the following purpoſes:

1. For ſpars, beams, and planks, which are exported in ſuch large quantities. 2. For charcoal, which is required for the ſmelting of the ores, for the glaſs furnaces, and other manufactures. The wood uſed for this purpoſe is uſually of an inferior ſort, and chiefly in the inner parts, where the tranſport of the planks is too expenſive. 3. For building, the greateſt part of the houſes in Norway being conſtructed of wood; for although there is plenty of ſtone, yet the tranſporting of the materials, and the lime, are too expenſive for common uſe. 4. For the roads, which, in the more northern parts, are almoſt entirely formed with wood. 5. For turpentine, for which the oldeſt trees are moſtly uſed. 6. For fencing and encloſing the fields, quickſet hedges being almoſt unknown. The woods uſed for encloſures is chiefly pine or fir, and muſt be renewed every three or four years. 7. For fuel. 8. For manure, by the ſame

proceſs

proceſs of burning the trees and manuring the ſoil with the aſhes, which is practiſed in Sweden, and is ſo deſtructive to the foreſts.

Beſides theſe general uſes derived from the foreſts, the particular trees are beneficially employed to the following purpoſes.

The bark of the pine or fir, and alſo of the elm, which is not common in Norway, is dried, ground, and mixed among meal, and is boiled up with other food to feed ſwine, who thrive much upon it.

The birch, which flouriſhes in theſe northern regions, is particularly uſeful for various purpoſes. It is more generally uſed for fuel than any other wood. The outer bark, or the white rind, on account of its firmneſs and ſap, eaſily eſcapes putrefaction even in the dampeſt places, and for this reaſon is employed for covering the roofs of the houſes, in order to keep out the rain.

This mode of roofing occaſions ſuch a large conſumption of the outward bark, that the birch which are felled would not ſupply a ſufficient quantity; it is, therefore, not unuſual

unuſual to ſtrip off the outward bark while the tree is ſtanding, and if peeled with care, it always grows again.

The inner bark of the birch is applied like the bark of oaks for tanning hides, fiſhing nets, and ſails, which it renders more durable.

This tree alſo ſupplies a kind of wine by the following proceſs: a hole is bored in the trunk, and the wine diſtils into a flaſk placed under it. The tree ſuffers little damage, if the hole is immediately cloſed by a wooden peg. The twigs of the birch, as well as the elder and aſpen, are given to horſes in ſcarcity of fodder. A decoction of oak leaves in beer is uſed by the peaſants as a cure for the rheumatiſm, by applying a cloth dipped in the decoction to the part affected.

The general exports of Norway are tallow, butter, ſalt, dried fiſh, timber and planks, horſes and horned cattle, ſilver, allum, Pruſſian blue, copper, of which the celebrated mine of Roras yields annually to the value

of

of £. 67,500; and iron, of which the moſt productive mine is near Arendal.

Norway abounds in lakes and rivers, more than any country I ever viſited excepting Switzerland. It is remarkable for the number and beauty of the bays fringed with wood. Many of the lakes are ſo large, that they appear like inlets of the ſea; and the bays are ſo ſmall, that they appear like lakes: but I am anticipating my journal.

CHAP.

CHAP. VI.

Fredericſhall — Fortreſs of Fredericſtein — Obſervations on the Death of Charles the Twelfth — Tiſtedal — Fredericſtadt — Chriſtiania.

SEPTEMBER 4. Norway is ſeparated from Sweden by the bay of Swineſund, a bay or inlet of the ſea, which in this part forms a ſtrait between the perpendicular rocks, ſo narrow as to bear the appearance of a river, yet ſo deep as to admit ſhips of the greateſt burden. On the Swediſh ſide of the bay our paſſports were examined by a Swediſh cuſtom-houſe officer; and on our being ferried over the other ſhore, our baggage was ſlightly inſpected by a Daniſh cuſtom-houſe officer, who dwells in a comfortable houſe overhanging the edge of the water.

In a few miles we reached Fredericſhall,

the frontier town of Norway, ſtanding on the extremity of the Swineſund, at the mouth of the river Tiſte. The principal commerce of the town conſiſts in the exportation of planks, the greateſt part of which are ſent to England. The wood is floated down the various cataracts, and river Tiſte, ſometimes above 100 Engliſh miles, from the interior parts of the country, and ſawed here: for this purpoſe thirty-ſix ſaw-mills are erected on the banks of the river Tiſte, which forms a ſeries of cataracts.

The harbour is very ſafe and commodious; but the large quantity of ſaw-duſt brought down the river from the different ſaw-mills choaks it up in many parts, and occaſions an annual expence for clearing it away.

The port poſſeſſes a few particular immunities. Goods imported for exportation pay no duty, unleſs touched for home conſumption, and then are charged with the uſual impoſts.

The town contains about 3,000 inhabitants; the ſtreets are airy; the houſes are built

built of wood painted red, and a few white.

On the ſummit of an almoſt perpendicular rock, which overhangs the town, ſtands the ſtrong and hitherto impregnable fortreſs of Fredericsſtein, much celebrated in the hiſtory of the north; as in beſieging it Charles the Twelfth received his death. I did not omit viſiting the ſpot rendered memorable by the death of the northern lion, as he is ſometimes emphatically ſtiled. This ſpot, which was once marked by a pillar erected by the king of Denmark, but pulled down at the requeſt of the king of Sweden, is at the extremity of the preſent governor's garden, at the bottom of the ſteep rock, on which ſtands the fort of Gullenlowe. It was to me particularly intereſting, for it convinced me that a ſmall ball might have reached Charles, as the diſtance from the neareſt baſtion could not be more than between five and ſix hundred yards. Nor could I avoid remarking, that Motraye's plan of Fredericsſtein and the adjacent batteries is in many parts extremely

deficient; and from the beſt information that I have collected, that both his and Voltaire's account of the king's death, and particularly of the wound which occaſioned it, are very inaccurate.

But in order to obtain farther and more complete information concerning the probable cauſe of the king's death, I called upon Benk Enkelſon of Tiſtedal, an old Norwegian, now in the ninety-ſixth year of his age, and who was in his twenty-eighth year when he ſerved as a gunner of the Daniſh garriſon when Fredericsſtein was beſieged by Charles the Twelfth. By means of a gentleman of Fredericſhall, who politely accompanied me to this old man's houſe, and obligingly condeſcended to be my interpreter, I procured the following intelligence; which I ſhall give to the reader in queſtion and anſwer, in the ſame manner in which I obtained it.

Do you think, that the king was ſhot from the ramparts, or aſſaſſinated by any of his own troops? *From the ramparts undoubtedly.* — What kind of ſhot was fired againſt

againſt the Swediſh trenches? *All ſorts, and particularly ſmall ſhot in cartouches from cannon.*—Could the king, in the place where he was, be reached by a ſmall ſhot? *Yes, very eaſily; as a ſmall ſhot could take effect at twice the diſtance.*—Were many ſoldiers killed near him? *Very many; they fell about him like ſtraw in ſuch numbers that they were buried on the ſpot. The place was alſo ſo much expoſed to the fire from the ramparts, that the Swedes could not venture to work at the trenches by day, but only in the night.*—From what fortreſs do you think Charles received his death; from Oberberg, or from the citadel? *Certainly from the batteries of the citadel, which bore upon the place, and not from Oberberg, from which it was defended by an intervening hill. I then ſerved in the fortreſs of Oberberg; and we did not that night fire a ſingle ſhot from thence* *.

From this circumſtantial evidence given by a perſon who had ſerved in the garriſon

* This ſhews the falſity of Motraye's account, which ſays, that the king was ſhot from the fortreſs of Oberberg.

of Fredericsſtein at the time when it was beſieged, and who had no prejudices or intereſt to bias or miſlead him, joined to my own obſervations upon the ſpot, we may reſt aſſured, that Charles might have been eaſily reached by a ſmall * ball from the ramparts

* An unqueſtionable proof that the wound was made by a ſmall ball is derived from the evidence of the following perſons of the higheſt rank and credibility. "On the 12th of July, 1746, between five and ſix in the morning, the following perſons entered the vault in which is interred the body of Charles the Twelfth, and examined the wound in his head. On the right ſide below the temple was a plaiſter ſo ſtrongly fixed as not to be removed without great difficulty; under which they noticed an orifice which ſeemed to deſcend to the back part of the head, ſeven lines long and two broad. On the left ſide was a plaiſter of the ſame ſize. All the temple was driven out, and the bones ſhattered in ſuch a manner, as made it eaſy to diſtinguiſh that the ball went out on that ſide. The face was a little diſfigured, the mouth a little open, and ſome teeth viſible.

Signed, C. Harteman, Ch. Ekelblad, and John von Hoepken.

Mr. Firman, an engraver of medals at Stockholm, poſſeſſes a maſk of plaiſter of Paris, moulded from the face of Charles the Twelfth, when the king's body

 lay

ramparts of the citadel; and therefore that the confident aſſertions of thoſe perſons who pretend, that he could not be touched by a muſket-ball, were totally groundleſs.

In oppoſition alſo to the opinion of the late queen-dowager, we may remark, that her majeſty was much prejudiced againſt Frederic king of Sweden, and inclined to adopt and circulate any report to his diſcredit. Influenced probably by his mother's prejudices, the preſent king was at one time ſo convinced, that Cronſtedt had aſſaſſinated Charles, as to refuſe giving a com-

lay at the palace of Carlſberg previous to the interment. The inſpection of this curious maſk, beſides repreſenting the exact features of that monarch, led me to make ſome remarks on the ſize and ſituation of the wound which occaſioned his death, and which has given riſe to ſuch contradictory accounts and conjectures. The maſk reaches no farther than the extremity of each temple. The mark of the wound on the right temple is very viſible, and is not large. The bones were apparently much ſhattered, but the eyes were perfect in their ſockets; ſufficiently proving, that they were not diſlodged, as Motraye and Voltaire aſſert.

miſſion to his grandſon, declaring, that he never would confer a military rank on the grandſon of a perſon who had aſſaſſinated the king of Sweden; but two years afterwards he voluntarily gave the commiſſion to the ſame perſon, candidly alledging, that he had been miſtaken, and that he was now convinced Cronſtedt had no ſhare in the king's aſſaſſination.

The queſtion, therefore, in regard to the death of Charles, is now reduced to a very ſhort compaſs; and all the vague anecdotes and uncertain conjectures, which, without any foundation *, attributes his death to aſſaſſination, can weigh nothing againſt poſitive fact.

Elkenſon deſcribed Charles as tall and thin; his hair ſhort, thick, and curling,

* In my ſecond viſit to Stockholm, I found, on more accurate enquiry, that many of the anecdotes which are related in Book VII. Chap. iii. on the death of Charles the Twelfth, as tending to confirm the report of his aſſaſſination, were either very uncertain, miſtated, or exaggerated; and particularly that the account concerning Cronſtedt's confeſſion and Frederic's remorſe was totally void of foundation.

with

with great animation of countenance. He ſhewed us a wooden chair, in which Charles was ſitting when he was ſhot. The old man recollected to have ſeen the king three times, once in particular in the town of Fredericſhall. As he was ſitting at the window of a houſe inhabited by one of the magiſtrates, he obſerved Charles in the oppoſite houſe. While the batteries from the citadel were firing heavily at the enemy's trenches, a young woman, who was looking at the king from one of the windows of the magiſtrate's houſe, chanced to drop a ring into the ſtreet. His majeſty taking notice of her, ſaid, "Madam, do the guns of this place always make ſuch an uproar?" "Never," returned the girl, "but when we are honoured with ſuch illuſtrious viſitors as your majeſty." The king was much pleaſed with the anſwer, and ordered one of his ſoldiers to take up the ring and return it.

The ſmall village of Tiſtedal is ſituated at about three miles from Fredericſhall, upon a beautiful cataract of the Tiſte, which

which precipitates itſelf in continued but irregular falls for a conſiderable way, and turns ſeveral ſaw-mills that form very pictureſque objects, impending over the torrent of waters. Above the village is a villa called Vake, from which we commanded a moſt delightful proſpect. Towards the inland parts, a ſmall lake beautifully fringed with paſture and wood; below, the river Tiſte forming a ſeries of cataracts, then winding through a ſmall valley and between two ridges of rocks ſhaded with pines and underwood; the bay of the ſea ſprinkled with rocky iſlands; the town of Frederic-ſhall and its caſtle towering on the ſummit of a perpendicular rock cloſing the view.

Fredericsſtadt, diſtant from Frederic-ſhall about four Norwegian, or nearly twenty-ſix Engliſh miles, ſtands upon the river Glomme, and is the moſt regular fortreſs in this part of Norway, containing an arſenal amply ſupplied with arms for the militia in caſe of a rupture with Sweden. It was built in 1567, by Frederic the Se-

cond, ſtrengthened by Frederic the Third, and has been ſince gradually enlarged and fortified according to the modern and more regular plan. The ramparts encloſe a ſpace of about three quarters of a mile in circumference, and the population of the town, including the two ſuburbs, amounts to no more than 800 ſouls. A few years ago the town was conſumed by fire, and the houſes are moſtly new. Cloſe to the town is the new fortreſs of Kongſteen, on a rocky eminence, capable of containing a garriſon of 300 men. Several convicts are here condemned to hard labour. The greateſt offenders have an iron cap, chains round their arms, legs, and bodies: the chains round their arms are rivetted to a wheelbarrow, which is never looſened.

The town is ſituated upon the Glomme, the largeſt river in this part of Norway. The inhabitants export planks, and a few ſmall maſts. The principal commerce is carried on by Meſſrs. Ankers and Holt, of Chriſtiania.

This river Glomme is not navigable in any

any part of its courſe from the lake. Mioſs to Fredericsſtadt, its ſtream being interrupted by ſuch frequent cataracts and ſhoals as in ſome places render it neceſſary to drag the trees, which are floated down, over the ground. At leaſt 50,000 trees are annually floated to Fredericsſtadt.

September 6. We ferried over the Glomme at the gates of the town, and continued our journey, anxious to reach Chriſtiania. The country is in general extremely fertile and agreeable, it riſes in gentle hills, and though rocky in many parts, is covered with a rich ſoil, producing abundance of corn, and clothed with foreſts of firs and pines, intermixed with oak, beech, poplar, and mountain aſh. The face of the country is prettily ſprinkled with numerous lakes and rivulets, and thickly dotted with cottages, rudely though not unpleaſantly ſituated on rocky eminences in the midſt of the luxuriant foreſt. Theſe cottages are moſtly covered with red tiles, and appeared larger and more commodious than thoſe we had juſt quitted in Sweden. They were ſo much

ſcattered

ſcattered over the hills, that we ſeldom obſerved a cluſter of more than four or five in one ſpot; and the churches ſtanding almoſt ſingly, their ſpires riſing above the ſurrounding trees, were pictureſque objects.

We ſtopped a ſhort time at Moſs, in order to examine the iron works belonging to Mr. Bernard Anker, of Chriſtiania. The ſituation of Moſs is exceedingly romantic. It is divided by a lively torrent, which daſhes over the crags, and turns ſeveral ſaw-mills, and ſtands on the ſhore of a beautiful bay or inlet, the riſing banks adorned with fine hanging woods, a few gentlemens' ſeats, and numerous farm houſes. The iron works, which principally ſupport the place, were firſt eſtabliſhed in 1705; for ſome time the proprietors only manufactured bar iron, grates, and ſtoves, and a variety of iron utenſils; but lately they have caſt cannon, which are moſtly exported to Copenhagen. The works employ about 150 men.

We paſſed the night at Skydjord, a ſmall village in a moſt delightful ſituation, where we found an inn with very comfortable accommodations,

commodations, and two very neat bed-chambers.

As we approached Chriſtiania, the country was more wild and hilly, but ſtill very fertile and agreeable; and about two miles from the town we came to the top of a mountain, and burſt upon as fine a view as I ever beheld. From the point on which we ſtood in raptures, the grounds, laid out in rich encloſures, gradually ſloped to the ſea; below us appeared Chriſtiania, ſituated at the extremity of an extenſive and fertile valley, forming a ſemicircular bend along the ſhore of a moſt beautiful bay, which being encloſed by hills, uplands, and foreſts, had the appearance of a large lake. Behind, before, and around, the inland mountains of Norway roſe on mountains covered with dark foreſts of pines and fir, the inexhauſtible riches of the north. The moſt diſtant ſummits were capped with eternal ſnow. From the glow of the atmoſphere, the warmth of the weather, the variety of the productions, and the mild beauties of the adjacent ſcenery, I could ſcarcely believe,

that

that I was nearly in the 60th degree of northern latitude.

We at length forced ourſelves from this enchanting ſpot, enjoying, as we gradually deſcended, the ſcenes before us, and arrived about mid-day at Chriſtiania.

Chriſtiania is diſtant about 30 Engliſh miles from the open ſea. The navigation of the bay is ſomewhat difficult, but ſufficiently deep for the largeſt veſſels, having ſix or ſeven fathom depth of water cloſe to the quay.

Chriſtiania is eſteemed the capital of Norway, becauſe it contains the ſupreme court of juſtice. It lies in latitude 59° 6′ 37″, and ſtands in a ſemicircular form on the northern extremity of the bay of Biorning, an inlet of the ſea, forming the northern extremity of the gulf of Chriſtiania, whoſe rocky ſhores are overſpread with thick foreſts.

Chriſtiania is divided into, 1. The city, and the three ſuburbs of Waterlandt, Peterwigen, and Fierdingen. 2. The fortreſs of Aggerhuus; and 3. The old town of Opſloe

or

or Anſloe. The city contains 418 houſes, the ſuburbs 682, Opſloe 400; and the number of inhabitants amount to about 9,000. The city, which formerly occupied the ſite of Opſloe, was rebuilt in its preſent ſituation by Chriſtian the Fourth, after a plan deſigned by himſelf. The ſtreets are carried in a ſtrait line, and at right angles to each other, are uniformly forty feet broad, and are very neat and clean.

Here is a Latin ſchool, endowed by Chriſtian the Fourth in 1635. It is governed by a rector or upper maſter, a corrector or under maſter, and three aſſiſtants; but contained, in 1784, only thirty-ſeven ſcholars. They are divided into ſix claſſes, and are inſtructed in Latin, Greek, and Hebrew.

A collection of about 6,000 volumes, lately left to the town by Mr. Deichman, a native, will ſerve to form the beginning of a public library.

The caſtle of Aggerhuus is built on a rocky eminence on the weſt ſide of the bay, at a ſmall diſtance from the city. It is a very

ancient

ancient fortreſs, and was beſieged by the Swedes in 1310. An inſcription over the door of a brick tower informed me, that it was ſtrengthened in 1633 by Chriſtian the Fourth; and ſeveral other dates and inſcriptions ſhewed, that it had received additional fortifications by the ſucceeding kings of Denmark. This fortreſs is ſmall but ſtrong. In peace the garriſon conſiſts of about 500 troops, but in war is augmented to 1000.

Aggerhuus ſuſtained a ſiege in 1717 from Charles the Twelfth in perſon, who occupied the city and ſuburbs, but was compelled for want of proviſion to retire. The walls of many houſes in Chriſtiania ſtill bear the marks of the balls which were ſhot from the batteries of the fortreſs againſt Charles, as he rode daily through the ſtreets with his uſual raſhneſs, and reconnoitred the ſtate of the fortreſs.

The governor of Aggerhuus is the chief governor of Norway. He preſides in the high court of juſtice, called *Overhoflet*, which judges in the laſt reſort all civil cauſes above

a certain value. In all cauſes ſurpaſſing that value an appeal lies to the ſupreme court at Copenhagen.

Opſloe was the ſite of the old town, which was burnt in 1624, and now contains only about 400 houſes, and the epiſcopal palace. The biſhop of Chriſtiania is metropolitan of Norway.

Chriſtiania has a very excellent harbour, and carries on a conſiderable trade. The principal exports are tar, ſoap, iron, copper, planks, and deals; allum manufactured at the cobalt-works for about £. 3,000; iron from the four works of Borum, Edſwold, Narkedahl, and Ondahlen, about £. 14,000; copper from Foldahl, at £. 10,000; planks and deals £. 90,000, principally to England.

The planks and deals are of ſuperior eſtimation to thoſe ſent from America, Ruſſia, and the other parts of the Baltic, becauſe the trees which yield them grow on the rocks, and are therefore firmer, more compact, and leſs liable to rot than the others, which chiefly ſhoot from a ſandy or loamy ſoil. The planks are either red or white

fir

fir or pine. The red wood is produced from the Scotch fir, and the white wood, which is in ſuch high eſtimation, from the ſpruce fir. This wood is the moſt demanded, becauſe no country produces it in ſuch quantities as this part of Norway. Each tree yields three pieces of timber, eleven or twelve feet in length, and is uſually ſawed into three planks. A tree generally requires ſeventy or eighty years growth before it arrives at its greateſt perfection.

The environs of Chriſtiania not yielding ſufficient planks for exportation, the greateſt part of the timber is brought from the more inland parts. The trees are hewn in the foreſts, and floated down the rivers and cataracts. Saw-mills are uſed for the purpoſe of cutting the planks, but muſt be privileged, and can only cut a certain quantity. The proprietors are bound to declare on oath, that they have not exceeded that quantity; and if they do, the privilege is taken away, and the ſaw-mill deſtroyed.

There are 136 privileged ſaw-mills at Chriſtiania, of which 100 belong to the

family of the Ankers. The quantity of planks permitted to be cut, amounts to 20,000,000 ſtandard deals, twelve feet long, and one inch and a quarter thick.

During our ſtay at Chriſtiania we received great civilities from the Ankers, the richeſt and moſt commercial family in Norway. Mr. Bernard Anker, who is Fellow of the Royal Society, ſpeaks Engliſh nearly as well as a native, poſſeſſes an excellent houſe in Chriſtiania, elegantly furniſhed in the Engliſh taſte, and ornamented with a good collection of pictures, which he purchaſed in Italy. He lives in a ſtile of elegant magnificence, and receives all travellers with unbounded politeneſs and hoſpitality. He has an excellent library, a good apparatus of natural philoſophy from England, and a curious collection of the minerals and marbles of Norway.

We alſo accompanied Mr. Anker to Vickery, a neat villa belonging to his family, about four miles from Chriſtiania. It ſtands pleaſantly on the bay, and commands many pictureſque views. The planks are ſhipped

cloſe

cloſe to the houſe. From thence Mr. Peter Anker drove me in a low phaeton drawn by two active Norwegian ponies to Bockſtadt, a country houſe which he has juſt built on the banks of a ſmall but beautiful lake, about four miles from Vickery, in the midſt of an endleſs foreſt, and ſurrounded by mountains. He ſhewed us his grounds, which are laid out very pleaſantly, and carried us into his kitchen-garden, which produces all kinds of vegetables, excellent cherries, pears, apples, apricots, currants, gooſeberries, and in a favourable ſeaſon tolerable peaches. He pointed out to me a ſmall plantation of all the principal trees which grow ſpontaneouſly in Norway. I remarked the plane, the aſpin, the aſh, mountain aſh, oak, elm, beech, birch, alder, willows, and various ſpecies of pines and firs, which form the riches of theſe parts.

Mr. Peter Anker has lately introduced various ſpecies of Engliſh huſbandry into theſe parts. He has ſown crops of clover, which ſucceed very well, and has lately cultivated turneps.

CHAP. VII.

Silver Mines of Kongſberg—Cobalt Works of Foſſum—Journey into the interior Parts of Norway.

SEPTEMBER 10. We quitted Chriſtiania with much regret, after having expreſſed our acknowledgment to Mr. Bernard Anker for his extreme politeneſs and hoſpitality. That gentleman alſo increaſed our obligations to him by ſketching out a tour through the inland parts of Norway, and by giving us a circular letter, which we found a paſſport of introduction, and a means of procuring accommodations and information.

A little beyond Giellebeck, the ſecond poſt-houſe from Chriſtiania, we paſſed, near the high road, a quarry of whitiſh grey marble, which was firſt opened in order to ſupply the ſtones for the new church at

Copenhagen,

Copenhagen, but is now no longer worked. In the middle of the quarry ſtands a column of the marble erected in honour of the late king Frederic the Fifth, who viſited this ſpot.

The houſes, and even cottages, in the neighbouring villages, are ornamented with ſtaircaſes from the blocks of this beautiful marble.

From this quarry we aſcended through foreſts of pines and firs to the ſummit called Paradisberg, or the Mountain of Paradiſe, ſo denominated from the fine view it commands, but which, in my opinion, was greatly inferior to that we enjoyed from the eminence overhanging Chriſtiania. The general features of this proſpect are views of diſtant mountains riſing above mountains; rich and extenſive foreſts, and below a fertile valley watered by the Dramme; the three towns of Brægnetz, Stromſoe, and Tanger, ſtanding at ſmall diſtances from each other at the bottom of ſome rugged rocks, and on the margin of a bay.

Theſe three towns are known by the

general name of Dramme, becauſe they are ſituated on that river. Each has its own church and ſeparate juriſdiction. The inhabitants are very induſtrious, and carry on a conſiderable trade. The principal exports are timber and planks; the imports, corn chiefly, and lead from England for the ſmelting of the ſilver ore at Kongſberg.

We changed horſes at Brægnetz, which lies on the ſide of the river oppoſite to that on which Stromſoe and Tanger are ſituated, and continued our route, coaſting the Dramme through a moſt delightful valley extremely rich in corn and paſture, ſo thickly peopled, that every fifty yards we obſerved a cottage, and for ſeveral miles together ſeemed to paſs through a continued village. The ſloping declivities which bound this vale are ſo thickly covered with trees, that at ſome diſtance they appeared as if they were clad with herbage. The inhabitants of this pleaſant diſtrict chiefly derive their ſuſtenance from the tranſport of corn and merchandize to Kongſberg, and in carrying back the ſilver coined at the mint of that place.

Having

Having ferried over the Dramme at Hogs-ſund, we quitted this ſmiling valley, and paſſing among hills and rocks, and over ſtony roads, we did not, till the duſk of the evening, reach Kongſberg, celebrated for its ſilver mines, whoſe produce has been conſiderably exaggerated by moſt of the travellers that have publiſhed on this ſubject.

Kongſberg ſtretches on both ſides the river Lowe, which, in its courſe through the town, falls in a ſeries of ſmall but pictureſque cataracts over the bare rocks. The crags which border this town are in ſome parts naked, in others clothed with wood, and intermixed occaſionally with ſlips of corn and paſture; but although there are a few agreeable and fertile ſpots, yet the leading features of the circumjacent ſcenery are ruggedneſs and horror. Kongſberg contains about 1,000 houſes, and, including the miners, 6,000 inhabitants. We were accompanied to the mines, which lie about two miles from the town, by a merchant who

ſpoke

ſpoke Engliſh, and obligingly ſerved as our interpreter.

Theſe mines were firſt diſcovered and worked during the reign of Chriſtian IV. There are ſix-and-thirty mines now working; the deepeſt whereof, called Segen-Gottes in der North, is 652 feet perpendicular. The matrix of the ore is the *ſaxum* of Linnæus. The ſilver is extracted according to the uſual proceſs, either by ſmelting the ore with lead, or by pounding.

The pure ſilver is occaſionally found in ſmall grains and in ſmall pieces of different ſizes, ſeldom weighing more than four or five pounds. Sometimes, indeed, but extremely rare, maſſes of a conſiderable bulk have been diſcovered; and one in particular which weighed 409 marks, and was worth 3,000 rix-dollars, or £. 600. This piece is ſtill preſerved in the cabinet of curioſities at Copenhagen.

Formerly theſe mines produced annually 350,000 rix-dollars, or £. 70,000; and, in

1769,

1769, even £. 79,000; at preſent they ſeldom yield only from £. 50,000 to £. 54,000.

Formerly above 4,000 men were neceſſary for working the mines, ſmelting and preparing the ore; but a few years ago 2,400 miners were removed to the cobalt-works lately eſtabliſhed at Foſſum, and to other mines, and the number is now reduced to 2,500.

By theſe and other reductions, the expence, which was before eſtimated at £. 5,760 per month, now amounts to only £. 4,400, or about £. 52,800 per annum. Yet even with this diminution the expences generally equal, and ſometimes exceed the profits.

Government, therefore, draws no other advantage from theſe mines, than by giving employment to ſo many perſons, who would be otherwiſe incapable of gaining their livelihood, and by receiving a certain quantity of ſpecie, which is much wanted in the preſent exhauſted ſtate of the finances in Denmark. For ſuch is the deficiency of ſpecie, that even at Kongſberg itſelf change for a bank note is with difficulty

culty obtained. The miners are paid in ſmall bank notes, and the whole expences are defrayed in paper currency.

The value of 13,000 rix-dollars, or £. 2,600 in block ſilver, is annually ſent to Copenhagen; the remainder of the ore is coined in the mint of Kongſberg, and transferred to Copenhagen. The largeſt piece of money now ſtruck at Kongſberg is only eight ſkillings, or four pence.

September 11. Having ſatisfied our curioſity, we departed from Kongſberg in the afternoon, and directed our courſe to the cobalt-works at Foſſum. We returned to Hogs-ſund; but inſtead of ferrying over the Dramme we coaſted that river for a little way, then turned into ſo rugged a road with ſuch deep ruts, that we very narrowly eſcaped being overturned; nor did we arrive at the place of our deſtination till paſt midnight. We had previouſly ſent forward a peaſant to order beds, concluding to find an inn, or at leaſt a peaſant's cottage, wherein we might paſs the night. To our extreme diſappointment, however, we learned that Foſſum, which

which we had taken for a town, contained only two or three villages, conſiſting of ſcattered cottages at ſome diſtance from each other; and that in the place we ſtopped at there was only the houſe of the inſpector of the cobalt-works. As it was already extremely dark and cold, and at ſome diſtance from any houſe where we could be accommodated, and more particularly as the roads we juſt paſſed had proved ſo dangerous, we ventured to knock at the inſpector's door, and to requeſt admittance for two Engliſh travellers who were benighted. The family being in bed, we were for a ſhort time in anxious expectation for the anſwer; and no knight errant was ever more agreeably ſheltered from darkneſs, wind, and weather, than we were, on being admitted into the hoſpitable threſhold.

On the next morning a good breakfaſt being ſpread for us, and compliments delivered from our hoſt and hoſteſs, with an invitation to paſs the day with them, announced their attention and civility. We now found that the name of this particular

houſe was Foſſum, and a collection of ſmall adjacent cottages was denominated Modum.

The gentleman, who had ſo kindly received us at ſo undue an hour, and without the leaſt previous acquaintance, was Mr. Bornſtein, a native of Germany, lately appointed inſpector of the cobalt-works. Having paid our reſpects to our hoſt and his amiable wife, whoſe politeneſs we ſhall ever recollect with gratitude, we ſtrolled about the grounds, and admired the ſituation of the houſe, placed near the rivulet Simora, in the midſt of a delightful valley, fertile in paſture and corn, hemp, flax, and vegetables, and bordered by high rocks richly clothed with wood.

The inſpector himſelf politely accompanied us to the works: we had an opportunity of obſerving the whole proceſs, from the firſt calcination of the ore to its final reduction of the Pruſſian blue; and were ſurpriſed that it goes through 270 hands.

The mine of cobalt was diſcovered about eight years ago on the ſummit of a rocky

mountain, near Skuterud, a ſmall village a few miles from Foſſum, where the works are eſtabliſhed on account of the numerous waterfalls which are neceſſary for turning the mills. About a mile from the mine has been lately diſcovered a vein of the moſt beautiful quartz; a very fortunate diſcovery, as quartz is abſolutely neceſſary to mix with the cobalt ore, in order to obtain the blue powder known by the name of the Pruſſian blue.

The ore being calcined, reduced to powder, and refined, yields the blue powder ſo much uſed.

The fabric employs 36 men, and the mines 320. In 1783, 1400 or 1500 weight was obtained, which ſold according to its fineneſs from £. 2. 10ſ. to £. 12 the 100 weight, and yielded £. 10,000. The expences in that year amounted to £. 12,000, becauſe the numerous buildings and machines neceſſary for carrying on the works were ſtill conſtructing.

When theſe are finiſhed, the expences will not amount to more than £. 4,000; and

and the inſpector aſſured me, that he ſhould then be able to make double the quantity of Pruſſian blue that he can at preſent. Therefore the clear gain to the crown will ſcarcely fall ſhort of £. 16,000 per annum.

The diſcovery of this mine is a great acquiſition to Denmark, as beſides giving employment to ſo many hands, it prevents the importation of Pruſſian blue.

About ſix miles from Foſſum, we ſtopped at the ſmall village of Skuterud, and aſcended the mountain, on the ſummit of which are the mines of cobalt. There are two mines, called the north and ſouth mine, each with four pits or openings. The deepeſt is no more than fourteen fathom, becauſe the ore is ſtill in great plenty near the ſurface. It is found in veins, and is blown up with gunpowder. In our way we paſſed the fine mine of quartz, which, as I before mentioned, ſupplies that neceſſary mineral for the cobalt-works, ſo neceſſary, becauſe twelve parts of quartz are mixed with one of cobalt, in order to produce the Pruſſian blue. This quartz is as white as

alabaſter,

alabaſter, and contains large veins of marien glaſs, or Ruſſian talk, which in ſome countries is uſed for windows inſtead of glaſs.

The proſpect from the ſummit of this mountain amply repaid the trouble of aſcending it, commanding a hilly country, and at ſome diſtance a large plain covered in many parts with rich foreſts, watered by ſeveral ſtreams, and by a large lake, which divides itſelf into three great branches, called Tyri-fiord, Holefiord, and Helsfiord; the banks of which are beautifully covered with fields of corn and paſture, and chequered with wood. Being prevented from long enjoying this delightful view by the duſk of the evening, we deſcended into the plain, croſſed the Snarum upon two rafts made of whole trees laſhed together, and came to Oulberg, where we found comfortable accommodations in a peaſant's cottage.

The next morning we continued our journey through a moſt agreeably diverſified country, ſometimes through a long extent of foreſts of pine and fir, interſperſed with other trees, ſometimes croſſing the fields

along a more open and fertile diſtrict to Skerendal, a ſmall village in the valley of Skeere, ſo called from a rivulet of that name, which falls into the lake Tyri.

The peaſant, who ſerved as a poſtillion, carried us to a very clean and comfortable houſe, cloſe to a ſaw-mill, and the maid of the houſe inſtantly ſet before us ſome coffee, cream, bread, and butter. Having taken refreſhment, we demanded of the ſervant what we had to pay. She anſwered nothing, and on our expreſſing ſurpriſe, as we took the houſe for an inn, ſhe added, that her maſter was owner of the ſaw-mill; that he was then abſent, or would have been proud to have received us; that he always left orders to admit all travellers, and to furniſh them with every thing they demanded, without accepting the leaſt gratuity; and that if we would ſtay and dine there, it would be adding to the obligation we had already conferred on them by deigning to accept their ſcanty fare.

Having expreſſed our acknowledgments for this rare inſtance of diſintereſted hoſpi-

tality, we embarked in a ſmall boat, and rowed acroſs the lake Tyri, which had made the principal feature in the proſpects we have lately enjoyed. This beautiful piece of water I take to be about twenty-five miles in circumference, including its bays and creeks; its ſhores are gentle eminences richly variegated with the moſt fertile meadows, corn fields and hanging foreſts, and backed by lofty mountains towering above each other. Nor have I yet recovered from the aſtoniſhment of perceiving ſuch a delightful country in ſo high a degree of northern latitude. Having rowed acroſs the lake we landed near Hole, a ſmall village in the diſtrict of Ringerike, deſervedly eſteemed the moſt fertile part of Norway.

From Hole, we continued our journey through a rich plain, the narrow roads winding between corn fields and incloſures of paſture, and changed horſes at Steen, near the pictureſque ruins of a church ſeated on a gentle eminence. This village contains alſo a few remains of ramparts, which prove it to have been formerly a place of ſome

importance. At a little diſtance we noticed a mound of earth or barrow, called by the natives the tomb of Halden the Black, king of Norway; and a little further, we paſſed the church of Norderhug, famous for a battle between the Swedes and Norwegians.

We ſoon quitted the rich plain, and penetrating into a hilly country, found the roads ſo exceedingly ſtony and ſteep as to require the utmoſt caution, particularly as the horſes in theſe parts are exceedingly active and lively; notwithſtanding all our precautions my carriage was overturned.

At Setran we again changed horſes, and while they were getting ready, we made our repaſt in a peaſant's cottage, containing a room with two beds, ſo clean and neat as would have done credit to a gentleman's houſe. In the room I obſerved a print of the unfortunate Struenſee in priſon, tormented by the devil: thoſe prints were, I preſume, circulated and greedily received by the common people at the time of his fall.

From thence we paſſed through a valley,

enriched

enriched by a fine waterfall, detached farm houſes, churches, clumps of trees, diſperſed among the corn fields and meadows; a river gliding along, and heightening by its tranſparency and murmurs the charms of this delightful ſcenery. As we were admiring the beauties of this ever-changing ſcenery evening came on, and I was ſuddenly ſtruck with a phænomenon, which never occurred to me except in Switzerland, and which I at firſt miſtook for a bright meteor in the heavens. It was a gleam of the ſetting ſun, illuminating the ſnow-capped ſummits of the diſtant mountains, and appearing like a flame of fire ſkirting the diſtant horizon. The air was clear, the ſtars ſhone uncommonly bright, and ſeemed nearer to the eye than I had ever obſerved them before, except upon the tops of the Swiſs alps.

We took up our abode during the night at Van, a village ſeated on an eminence, and overlooking the Rands-Sion, a lake near fifty miles long, and ſcarcely more than two miles broad, emboſomed in the mountains,

its ſloping banks prettily fringed with wood, and chequered with ſcattered cottages. The next morning we ferried over the lake, and coaſted it for about ſix miles, the road aſcending and deſcending the precipices which overhang the water. We afterwards rowed over ſeveral ſmaller lakes, which ſupply ſtreams that fall into the Rands-Sion. I obſerved much peaſe and ſome corn ſtill ſtanding, but which the peaſants were cutting as faſt as poſſible; ſeveral ſmall patches of hops which were very good; many goats were browſing on the ſides of the rocks; and ſeveral flocks of ſheep were paſturing in the vallies, among which a great many were black.

In theſe parts the price of a milch cow is from ſeven to nine rix-dollars, £. 1. 8 *s.* to £. 1. 16 *s.* and in winter, when fodder is ſcarce and dear, one may be purchaſed for 16 *s.* We met during this day's journey ſeveral droves of bullocks and horſes driving for ſale to Chriſtiania. The bullocks ſell from £. 2 to £. 2. 8 *s.* per head; and the horſes,

horſes, which are from thirteen to fourteen hands high, and remarkably active and lively, from £. 4 to £. 8 apiece.

We next reached Gran or Granewolden, ſtanding on an eminence riſing in the midſt of an extenſive plain, looking down upon ſeveral conical rocks, covered with firs, and remarkable for its two churches in the ſame church-yard, called the Two Siſters. Theſe buildings ſeem of the ſame date, and at a ſmall diſtance nearly reſemble each other. One is built of ſtone, the other is white-waſhed. In one, dedicated to the Virgin, divine ſervice is performed only in Lent; in the other, ſacred to St. Nicholas, during the remainder of the year. I could not learn by whom, or at what period, theſe twin churches were built.

The ſtony roads having ſhattered the wheels of my cart, we ſtopped for the purpoſe of having it repaired at Dahlin, near the northern extremity of the Rands-Sion, backed by a well cultivated and well inhabited mountain.

This part of Norway is greatly infeſted with wolves and bears. The latter do the moſt harm, not only in killing the cattle, but alſo by deſtroying the corn. The inſtances are very rare, which will induce them to attack the human ſpecies.

The ſhepherds are uſually followed by large dogs of the Newfoundland ſpecies, armed with collars of iron ſpikes, in order to preſerve them againſt the wolves, who frequently attack them, and endeavour to ſeize them by the neck. The bears uſually fly from them.

The roads of Norway had hitherto appeared to us, long uſed to the Swediſh roads, exceedingly rugged, and ſcarcely paſſable with carriages, and both my companion and I had been occaſionally overturned; but the road we now paſſed over mount Kiolway was ſo execrable, that the others were in compariſon ſuperexcellent. I much queſtion indeed if any cart had ever paſſed before we ventured to traverſe it. We aſcended about four Engliſh miles, and then deſcended

ſcended about the ſame diſtance, and were obliged to diſmount and ſupport our carriages, in order to prevent them from overſetting, which, notwithſtanding all our precautions, occaſionally happened. During the firſt part of the way we paſſed a few cottages; but further on all was wild and uninhabitable, rocks clothed with pines and firs, a dreary but ſublime ſcenery, commanding from the ſummit a moſt extenſive proſpect; to the ſouth of the delightful country we had traverſed in our way to Dahlin, the Rands-Sion appearing like a broad river winding among the gloomy rocks; and to the north, hills piled upon hills, and mountains towering above mountains; the ſnowy alps cloſing the majeſtic view.

At the bottom of the deſcent we croſſed a lively rivulet called Ana, came to a lake of the ſame name, and took up our lodgings at the village of Titerud, moſt delightfully ſituated on the banks of a ſmall but beautiful lake, forming the calmeſt and lovelieſt retreat I ever beheld.

In

In this ſequeſtered ſpot, we found, beſides the rooms appropriated to the family, two neat bed-chambers for ourſelves, met with excellent tea and ſugar, butter, and cream, and ſupped upon a fine trout, weighing about ſix pounds, with which fiſh the lake abounds.

September 14. At Titerud, we quitted the mountains, and traverſed a gently waving country, as fertile and pleaſing as the diſtrict of Ringerike, well cultivated and well peopled, the roads winding through the fields like garden walks; changed horſes at Quickſtand and Lund, and paſſing through a lawn planted by the hand of nature, and which had the appearance of a park, we reached the banks of the lake Mioſs.

This lake extends from north to ſouth, and is 80 Engliſh miles in circumference. It is divided by a large peninſula, and is in general from twelve to eighteen in breadth. It contains one iſland about ten miles in circumference, fertile in corn, paſture, and wood, and ſprinkled with ſeveral farm houſes.

The

The banks of the lake on the ſide where we embarked, is bounded by abrupt bleak hills, embrowned with thick and dark groves of pine and fir, whoſe gloomy aſpect reminded me, that we were in the 62d degree of northern latitude, and contraſted on the oppoſite ſide with banks gently riſing from the margin of the water, enriched with fields of corn and paſture, and reſembling the fertile diſtricts of a more ſouthern climate; the whole exhibiting a rugged, perſpective, and pictureſque wildneſs on one ſide, and on the other, the cultivated beauties of a milder atmoſphere.

We rowed between the iſland and the peninſula, upon the extremity of which ſtands Naſs, a ſmall but neat village, and in about two hours landed at Hammer, a gentleman's ſeat, formerly a large town, containing near 2000 inhabitants.

The ſite of this once flouriſhing town can now be only traced by ſome parts of the old walls, heaps of rubbiſh, and the pictureſque remains of a large cathedral, conſiſting of four Gothic arches, which

ſtand

ſtand on an eminence over-looking the lake.

Having ſatisfied our curioſity, we reimbarked, rowed about five miles to a ſmall village, landed, and walked to Giellum. Here we procured horſes, and continued our journey through a leſs peopled diſtrict thickly ſtrewn with foreſts, ferried over the Glomme, about as broad as the Thames at Henley. This river receives the Worme, which iſſues from the lake Mioſs.

We had frequent views of the Glomme, which preſented a broad ſurface, ſometimes watering pleaſant vallies, ſometimes winding between rocky cliffs, precipitating itſelf in frequent cataracts, and ſometimes interrupted by ſand banks, over which it frequently ſhifts its courſe.

Being now in the 62d degree of north latitude, and in a mountainous country, we had already experienced the approach of winter. On the 14th of September it ſnowed. On the 15th it was a ſevere hoar froſt, and the ſurface of ſeveral ponds and ſtagnant waters were frozen the thickneſs of half

half a crown. It was, however, clear and ſunny, like a fine day in November; but this morning, September 17, it is as cold and ſevere as with us in the beginning of January. The pines and firs are ſo thickly covered with hoar froſt as to bear the appearance of being ſprinkled with ſnow, and the foreſt trees have changed their leaves in the ſpace of one night.

This morning having ferried over the Glomme, here as deep and about as broad as the Thames at Putney, we reached Kongſwinger, a ſtrong fortreſs which guards the frontiers of Norway.

Kongſwinger contains about fifty ſmall wooden houſes, ſtanding near the Glomme, at the foot of the eminence on which towers the citadel.

The citadel ſtands on a ſteep rock, and is deemed impregnable. Charles the Twelfth reconnoitred it, but found the poſition ſo ſtrong, that even he thought it prudent to decline the attempt. It conſiſts of ſeveral parts built at different intervals. The moſt ancient was probably conſtructed above 400 years

years ago, and has been gradually enlarged, particularly by Chriſtian the Fifth and Frederic the Fourth.

The fortifications which have been lately added render it a regular fortreſs with eight baſtions. In time of war it requires a garriſon of 1000 men; its preſent complement conſiſts only of 120. Some eminences on the other ſide of the river are higher than that on which the fortreſs ſtands, and would be the only means by which the works could be attacked with any proſpect of ſucceſs; but the officer who accompanied us aſſured us, they were ſo extremely ſteep and rugged, that it would be almoſt impracticable to draw to their ſummits large pieces of artillery of a ſize ſufficient to batter the walls.

From the windows of the fortreſs, we commanded a fine view of the Glomme, winding at the foot of a ridge of hills, clothed with trees, and chequered with fields of corn and paſture; the ſmall lake Wingen forming a beautiful feature in the variegated landſcape.

CHAP.

CHAP. VIII.

Entrance into Sweden — Carlſtadt — Philipſtadt — Kioping — Biographical Anecdotes of Scheele.

SEPTEMBER 18. A few miles from Kongſwinger, we paſſed a ridge of hills, which ſeparate the waters that flow into the Glomme, and thoſe that run eaſtward into the Wenner; changed horſes at Magnor, the laſt village in Norway, ſoon reached the frontiers, which are marked by a line drawn from north to ſouth, and paſſed ſeveral flat ſtones, which form the limits of the two kingdoms. On one ſide I obſerved the cypher of Adolphus Frederic, 1754, and on the other that of Frederic the Fifth, bearing the ſame date.

On our entrance into Sweden our paſſports were examined, and our baggage ſlightly examined by a cuſtom-houſe officer.

Without

Without this ceremony we ſhould have recognized our arrival in Sweden by the goodneſs of the roads, which far exceed thoſe of Norway; and indeed are as good, though not ſo broad, as our turnpikes in England. Such indeed are their goodneſs throughout the whole country, that during ſeveral thouſand miles which I travelled in this and my former tour in 1779, I ſcarcely met with fifty miles that deſerved the appellation of indifferent. They are alſo as pleaſant as they are good; and in many places look like gravel walks carried through gentlemen's grounds and plantations, as they wind through the fields and extenſive foreſts, the lofty trees caſting a gloomy ſhade with their overhanging foliage.

The two principal objects of our journey from the frontiers of Norway to Stockholm were to examine the canal of Stroemſholm, and to viſit the mines of Dalecarlia. Our route lay through the fertile and delightful provinces of Wermeland and Weſtmanland; at firſt diverſified with mountains, rocks, hills, and dales, clothed with foreſts

foreſts of birch, poplar, mountain aſh, pine, and fir, and abounding with lakes which ſucceed each other almoſt without interruption. Nothing can exceed the beauty of theſe lakes—they are from four to forty miles in circumference; ſome ſo narrow as to appear like broad rivers, others of a circular ſhape; their ſhores in ſome parts ſteep and rocky, in others gently ſloping, but always feathered with hanging wood to the margin of the water; the roads delightfully winding through the dark foreſts, which overhang the impending precipices, and overſhadow the water. Numerous rivulets flow from theſe lakes, rippling over their ſtony channels, or forming ſmall cataracts, which gliſten through the intervening foliage.

The principal places we paſſed through were Carliſtadt, Philipſtadt, and Kioping. At a ſmall diſtance from Carliſtadt we came to the Klara Elb, or large river, a fine clear ſtream, but with ſo ſmall a current, as to appear like a narrow lake; we coaſted its banks, which are prettily fringed with un-

derwood, until it divides into two ſtreams ſurrounding the iſland of Tingwalla, on which Carlſtadt is built. Theſe two branches afterwards unite and fall into the lake Wenner.

The iſland is twelve miles, and the town about a mile and a half in circumference. It was built by Charles the Ninth, and called after his name. The ſtreets are broad and ſtrait. Excepting the cathedral and ſchool, the houſes are built of wood and painted. It is a biſhop's ſee; the epiſcopal palace is likewiſe of wood, but not painted, and has ſo extenſive a front, and ſo many windows, as to look like a manufactory. The town contains about 1,500 inhabitants, who carry on a commerce of iron and wood acroſs the Wenner, and import in return tea, ſugar, and ſpices.

Philipſtadt ſtands in the midſt of a hilly, and rocky country, abounding in iron mines, between two ſmall lakes, on a lively rivulet. This town was alſo built by Charles the Ninth, and called after his ſon Philip. In 1775 it was utterly deſtroyed by fire, and has

has been ſince rebuilt. It contains no more than ſixty houſes, which are conſtructed of wood, and a church and hoſpital built of ſtone, plaiſtered.

We paſſed through Arboga, and continued our journey north of the river Ulviſon, through a rich and beautiful vale, to Kioping, a large ſtraggling dirty town on a ſmall ſtream, which falls at a little diſtance into the lake Maeler. The veſſels aſcend this ſtream near the extremity of the town, and convey acroſs the Maeler to Stockholm the iron which is produced from the mines of Wermerland.

I did not omit paying a viſit to Mr. Scheele, ſince deceaſed, who was ſettled as an apothecary at Kioping, and whoſe chymical diſcoveries have rendered his name deſervedly celebrated among the naturaliſts of Europe.

Charles William Scheele, the ſon of a tradeſman, was born at Stralſund, in December, 1742. He received the earlieſt rudiments of education at a private ſchool, and afterwards in the ſeminary of that town.

Having at a very early age expreſſed a ſtrong deſire to follow the profeſſion of an apothecary, he was bound apprentice to Mr. Bauch, of Gotheborg, with whom he continued till 1765. There he laid the foundation of his chymical knowledge. He was remarkably quiet and ſerious, extremely attentive to the medical and chymical preparations, and uſed afterwards to repeat the proceſs in his own apartment. He ſeems to have been firſt excited to the ſtudy of chymiſtry, by the peruſal of Neuman's chymiſtry, recommended by Grunberg, an apprentice in the ſame ſhop. He alſo met with Lemerie and Stahl's works, and Kenckell's Laboratory, which ſeems to have been his favourite book.

In 1765, he departed from Gotheborg, and ſerved different apothecaries; firſt, Karlſtroem, of Malmoe; ſecondly, Scharenberg, of Stockholm; and, in 1773, obtained an appointment with Loock of Upſala.

At Upſala he increaſed his knowledge by forming an acquaintance with the learned men of the univerſity, particularly the ſtrict-

eſt

eſt friendſhip with profeſſor Bergman, and by having free acceſs to the public laboratory.

In 1775, he was appointed by the medical college apothecary at Kioping, where he finiſhed his days.

The reader will find, in Wells's Chemiſche Annalen for 1787, a liſt of the works and principal diſcoveries of Scheele; alſo in the Gentleman's Magazine for April, 1789.

His character as a chymiſt is ſufficiently known by his great and numerous diſcoveries in that ſcience.

Scheele had ſtruggled during his whole life againſt narrow circumſtances; and when appointed apothecary of Kioping, he involved himſelf in debt in order to purchaſe the ſtock which had belonged to his predeceſſor. He had been for ſome time engaged to marry his predeceſſor's widow; but waited until he had diſcharged his debts, and had collected a moderate proviſion for her in caſe of his death. He had ſcarcely effected his purpoſe, and received the offer of

an annuity of £. 300 per annum, if he would ſettle in England, which would have afford-ed him more leiſure, and a ſufficient income to purſue his chymical diſcoveries, when his health declined. His diſorder began with an inflammation in his eyes, ariſing probably from the intenſe zeal with which he carried on his chymical experiments, and ended in a total debility, which hurried him to the grave on the twenty-firſt day of May, 1786, in the fifty-fifth year of his age. Two days before his death, he was married to the perſon to whom he had been ſo long betrothed, and left her the little money he had been able to ſave.

The union of virtue and knowledge is doubly meritorious; and it is a pleaſing ſatisfaction to add, that the morals of Scheele were ſtrict, and his conduct as irreproachable as his morals in all ſeaſons of life.

Scheele had neither time nor inclination to form common acquaintances; for moſt of the hours which he could ſpare from his ſhop and the duties of his office he employed in his laboratory and library; but

he was greatly attached to a few congenial friends, and fond of converſing with them on ſubjects of chymiſtry. He was to them extremely open, and of a communicative diſpoſition, never in the leaſt deſirous of withholding his information, or concealing his diſcoveries.

Before he adopted any opinion, he was particularly cautious; but when he had once formed it he was deciſive, and defended it with firmneſs, yet without heat. He was, however, always open to conviction; and more than once retracted his opinion, whenever he was convinced by argument or experiment.

Scheele underſtood no other languages but the Latin, German, and Swediſh; ſo that he had not the advantage of being benefited by the early intelligence of diſcoveries made by foreigners, and was forced to wait until the information was conveyed to him in the ſlow and uncertain channel of tranſlation. Even his acquaintance with the Swediſh was not ſufficient to write the treatiſes he ſent to the Swediſh academy

of ſciences in that tongue, but he was accuſtomed to compoſe them in German, from whence they were tranſlated into Swediſh.

When we conſider the number and accuracy of Scheele's experiments, we ſhould naturally preſume that his chymical apparatus was very complete, and his laboratory large. On the contrary, his laboratory was extremely confined, and his apparatus extremely inconvenient, owing, probably, to the ſcantineſs of his circumſtances.

If he made ſuch important and accurate diſcoveries with a ſcanty and inconvenient apparatus, and without any aſſiſtance, what would he have done, if his circumſtances and his ſituation had been different?

CHAP.

CHAP. IX.

Palace of Stroemſholm—Canal of Stroemſholm uniting the Province of Dalecarlia with Stockholm—Incidents of the Journey.

THE palace of Stroemſholm, which gives its name to the canal now forming between the lakes of Dalecarlia and the Maeler, is prettily ſituated upon a very ſmall iſland, encircled by two rapid currents, which fall in a few paces into the Freden lake, that communicates with the Maeler. It was built by Hedwige Eleonora, widow of Charles the Tenth, who lived to be regent during the minority of her grandſon Charles the Twelfth; but not being finiſhed during her life time, it was never inhabited until the preſent king fitted it up in 1774. It is built of brick, ſtuccoed white, and the front is ornamented at the eaſt end by two projecting ſquare towers, and by a light

light octagon dome in the middle of the roof. I have ſcarcely ever ſeen a more comfortable houſe; the rooms are lofty and ſpacious, and the upper ſtory commands a beautiful view of the Freden and the Maeler lakes. It ſtands in a park beautifully planted by the hand of nature with many fine oaks.

Near the palace are ſeveral old wooden buildings, which bear the appearance of carpenters' houſes; one of which was inhabited by queen Hedwige, while the palace was preparing for her reception. It is exceedingly curious, remaining in its original ſtate with the furniture of the laſt century. I noticed ſeveral fine portraits; a head of Hedwige herſelf at a very advanced age; another of Chriſtina, three quarters ſize, leaning one hand upon a lion's head, well painted, with great expreſſion of countenance; a ſtill finer picture, whole length, of Charles the Twelfth, in the ninth year of his age, leaning alſo upon a noble lion's head: the painter is the Swediſh Ehrenſahl. Charles is here repreſented as a moſt

beautiful

beautiful boy: both his phyſiognomy and appearance are ſoft and effeminate, and, except in the luſtre of his eye, by no means characteriſtic of his ſubſequent character.

This palace gives its name to the canal now forming between the lakes on the confines of Dalecarlia and the Maeler, with the following intention.

As the iron and copper from the mines of Weſtmanland and Dalecarlia, are conveyed by land to the lake Maeler, before they can be forwarded by water to Stockholm; the tranſport of ſuch heavy goods is of courſe exceedingly expenſive. Accordingly a plan was projected to render the waters navigable from the Sodra Barken, a lake on the confines of Dalecarlia, to the lake Freden, which communicates with the Maeler, or in other words to form an inland navigation from the confines of Dalecarlia to Stockholm.

The waters which join the Sodra Barken and the Freden, conſiſt of numerous lakes and rivers, which, flowing through a rocky country, fall in repeated cataracts, are full of

of ſhoals, and extremely difficult to render navigable. The rivers which flow from them into the ſeveral lakes are called in the map by the general name of Rhumnætz river, but take local appellation from the lakes which they join, from the villages which they waſh, and from the forges which they turn.

For the purpoſe of examining the ſeveral works, we had the honour of obtaining, by the king's command, an order from Baron Sparre to the inſpectors of the ſluices; we had alſo an opportunity of inſpecting a large plan of the canal, and received from the baron a plan on a ſmaller ſcale, which has enabled me to give an engraving of the canal.

The plan was formed by Mr. Alſtroem, a celebrated engineer, who laid it before the board of mines in 1776, and rated the expence at £. 40,000. Being rejected by the board as too expenſive and difficult, it was patroniſed and adopted by Baron Sparre, governor of Stockholm, and a fund raiſed by a ſociety of individuals. The king agreed

to

to allow the proprietors four per cent. for all the money expended during a term of four years, and afterwards prolonged that term until the proprietors ſhould receive a profit of four per cent. It was begun in 1778.

By inſpecting the plan the reader will perceive, that in thoſe parts where it was impoſſible to render the waters navigable, the lakes and ſtreams iſſuing from theſe lakes have been joined by the following cuts: Stroemſholm, Waterquarz, Præſtfors, Skantze or Traenfors, Alſatra, Magfors, Ramnætz, Seglingſberg, Væſtanfors, Udnæs, Fagerſta, and Simla. Of theſe the largeſt is that of Skantze, which is 8,400 feet in length.

In many parts the bed of the rivers have been deepened, and the rock blown away under water by means of machines invented by the celebrated Turnberg, and ſimplified by Alſtroem.

The ſluices, which are twenty-five in number, are all 100 feet long, and 72 broad, faced with walls of granite. Of the 25 ſluices eleven were finiſhed; and it was conjectured, that if the proprietors could ad-

Alſatra; but as the rain poured down with great violence, we continued our journey in our carriage, coaſted the ſeveral lakes and waters which form the inland navigation, and paſſed the numerous cuts and ſluices, ſome of which we examined. We changed horſes at Stoltorp and Rhamnætz, and reached Næſs with an intention of croſſing over to Virſboe, where we were aſſured of an hoſpitable reception at a houſe belonging to Baron Silverſchiolde. But we did not reach Næſs until night had ſet in; and as it was exceedingly dark, and the weather very tempeſtuous, we could not find any waterman who would venture to convey us acroſs the lake. We were unwilling to return to Rhamnætz; and it was not without great difficulty we could obtain admittance into a peaſant's cottage. Although the hovel which ſheltered us was wretched, yet a comfortable fireſide and ſome clean ſtraw appeared abſolute luxury to us, pierced with cold, and wet with travelling the whole day in open carts expoſed to the inceſſant rain.

September 24. The windy weather continuing,

tinuing, and the morning appearing cloudy and inclining to ſhowers, we ſent for poſt-horſes, propoſed returning to Rhamnætz, and proceeding by land to the mines of Dale-carlia, without viſiting the remaining parts of the canal, when we were agreeably prevented by the unexpected arrival of Mr. Berger, inſpector of the works at Skantze. He brought compliments from Mr. Alſtroem, who was ſorry he was not at home when we called at his houſe, and had now diſpatched his inſpector to offer his ſervices, and accompany us to Virſboe and Væſtanfors. We readily accepted this kind offer, and rowed over to Virſboe, delightfully ſituated on a promontory which projects into the lake. Being hoſpitably treated by Mr. Ulberg, inſpector of the iron forge belonging to Baron Silverſchiolde, we embarked in a ſix-oared boat, in company with Mr. Berger, who ſteered. The wind blew very hard, and directly contrary, ſo that our boatmen were employed five hours in rowing againſt wind and current the ſpace of fifteen miles. This part of the navigation from Virſboe to

Væſtanfors is entirely complete; and indeed boats have ſailed from Væſtanfors to the beginning of the works at Traengfors. We rowed acroſs ſeveral lakes, and aſcended the currents of the rivers which join them. The lakes are very beautiful: of theſe the Ameningen is about twenty-ſix miles, and the Stora Aſpen twenty, in circumference. The expanſe of water is broken with many woody iſlands, and their ſhores are fringed with trees growing to the margin of the water, and interſperſed with villages.

After five hours rowing againſt the wind, we at length reached Væſtanfors, and landed near the houſe of Mr. Bedouar, proprietor of an iron foundery. We diſpatched our Swediſh ſervant to procure us a lodging, and order what could be prepared for our dinner. While we were waiting in the cold the return of our meſſenger, Mr. Bedouar came out. He was informed, he ſaid, by Mr. Berger, that we were Engliſh gentlemen upon our travels, and had letters of recommendation from Baron Sparoe; either of thoſe circumſtances were ſufficient in-

ducements to him not to ſuffer us to look out for a lodging elſewhere than in his houſe; that we ſhould find but bad accommodations in the village, and that he would abſolutely take no refuſal. Although extremely unwilling to give ſo much trouble to a perſon with whom we were wholly unacquainted, yet we could not reject an invitation ſo politely made, and ſo ſtrongly enforced. We accordingly took poſſeſſion of very comfortable apartments, which, our landlord added, were ours as long as we choſe to favour him with our company. By this time it was near five, and we were extremely hungry. But as we well knew that the family hour of dining in this country is twelve, we were preparing privately to ſatisfy our appetites with ſome bread and cheeſe, which we had fortunately brought with us, when Mr. Bedouar himſelf announced to us that dinner was ready; one among many inſtances of the polite attentions we received from our worthy hoſt.

Having made a hearty meal, we accompanied Mr. Bedouar about the environs.

His houſe is pleaſantly ſituated near a cataract of the river, and commands a fine view of the ſmall lake of Frangen, agreeably ſkirted with trees, of the adjacent villages of Udnæs and Tagerſta, and of the Stora Aſpen; the ſpire of the church of Væſtanfors painted of a deep red, and ſome cottages ſtanding on a gentle eminence, forming pictureſque objects on the oppoſite ſide of the cataract. The evening having already ſet in, the beams of the moon gliſtened in the foam of the deſcending cataract, and on the agitated ſurface of the lakes.

The next morning our obliging hoſt prepared a boat, and requeſted Mr. Lofgren, inſpector of the works in thoſe parts, to accompany us to the ſluices. We firſt examined the cut and ſluice of Væſtanfors, which is 600 feet long, and excavated near the banks of the cataract. The ſluice was finiſhed, except the gates. We then embarked, rowed up the lake Frangen, admired its banks, gently waving, and covered with trees, paſture, and arable land, the

ſouthern

ſouthern extremity bounded by the church and village of Væſtanfors, the northern by the village of Udnæs. We landed on the ſouth ſide of the cut forming at Udnæs, which is 320 feet long, again took boat above the cataract, and rowed through the Fagerſta river, which has been deepened by ſpringing the rocky bed under the water for above 1,600 feet. Fagerſta cut is 1,400 feet long, and the greateſt depth of the excavation 23. On the ſide of the cataract is a forge, and a country houſe of wood painted white belonging to Mr. Bankæus, the proprietor of the iron works. We walked through Mr. Bankæus's garden, and again embarked on the northern extremity of the Fagerſta cut, rowed up the river Simla, landed on the ſouthern extremity of the Simla canal, and examined the ſuperb works which are almoſt finiſhed. The Simla cut is 3,000 feet in length, of which 630 have been hollowed in the rock. The depth of the excavation is 24 feet.

The river in this ſpot forms a ſucceſſion of cataracts; and its ſhores are ornamented

with a villa placed in a moſt romantic ſituation. In all theſe parts an iron forge, a country houſe belonging to the proprietor of the iron works, and a ſmall cluſter of houſes inhabited by the workmen, hang ſuſpended over each cataract. The roaring of the waters, the beating of the hammers, and the bellowing of the furnaces, ſeem to ſtrive for maſtery.

The northern ſluice at Simla is the firſt ſluice of this canal of Stroemſholm; from thence the navigation is open to the Sodra Barken on the confines of Dalecarlia.

No doubt can be entertained of the utility of this inland navigation, which, when finiſhed, will connect the province of Dalecarlia with the capital; and it reflects the higheſt honour on the engineer who planned the works; on the ſovereign who patronized them; and on the individuals who have riſked their fortunes in ſo arduous an undertaking.

The expence has already amounted to 100,000 rix-dollars, or £. 25,000. 50,000 rix-dollars, or £. 12,500, are wanting; and it

it is conjectured, that for that ſum the whole might be completed in four years.

From this agreeable excurſion we returned to Mr. Bedouar's hoſpitable manſion. The next morning we took leave of our friendly hoſt, to whom we could not ſufficiently expreſs our obligations; and in a few miles entered the province of Dalecarlia. We ſoon afterwards came to the lake Sodra Barken, paſſed the ſmall town of the ſame name, which ſtands on a promontory dividing the Sodra from the Nodra Barken. The road winded delightfully on the weſtern bank cloſe to the margin of the water; and the view of the lake was enlivened by a number of boats filled with peaſants, who were returning from church.

We changed horſes at Norbarke, a ſmall village on the north weſtern extremity of the lake, which will become a place of much commerce if the canal of Stroemſholm ſhould ever be completed, as it muſt be the great depoſitory for the iron, copper, and other commodities which will be tranſported from theſe parts to Stockholm.

From thence we ſoon entered a wilder country, thickly clothed with foreſts, paſſed a ſucceſſion of hills and vallies watered with numerous lakes and rivulets, and on the cloſe of the evening arrived at Ruſtgoden, a ſmall village in the province of Dalecarlia. The firſt appearance of the inn did not prejudice us in its favour; but on entering we found ſeveral very comfortable apartments and clean beds; and we had ſcarcely ſeated ourſelves, when part of the ſupper which had been prepared for the family was placed before us. It conſiſted of a cock of the wood, eggs and bacon, potatoes, and pancakes. At any time ſuch a fare would have been acceptable; but it was moſt unheard of luxury to us, who had faſted from eleven in the morning, and whoſe appetites had been ſharpened by the keenneſs of the air.

The king, who juſtly prides himſelf on his deſcent from Guſtavus Vaſa, ordered a wet-nurſe for the prince royal to be choſen among the women of Dalecarlia, a province whoſe natives had firſt ſupported Guſtavus

Vaſa,

Vaſa, and enabled him to begin thoſe efforts which ended in the expulſion of Chriſtian the Second, in the freedom of his country, and in the eſtabliſhment of the houſe of Vaſa on the Swediſh throne. Accordingly three women were choſen, amongſt whom was our landlady. Although ſhe was not fixed upon to ſuckle the prince, yet ſhe ſtaid ſome time at the palace of Drotningholm. She ſhewed us, with much ſatisfaction, a dreſs of buff-ſilk and ſky-blue, edged with ſilver lace, which ſhe received by order of his majeſty. From her journey to court, and the preſents there received, ſhe has derived great conſideration among the peaſants of this neighbourhood. In general the peaſants of Daleçarlia, who have been always remarkable for their loyalty, were much flattered with the mark of diſtinction paid to their province; and in the late danger which threatened Sweden from the Ruſſian war, and the invaſion of the Danes, (1788) were the foremoſt in proving their attachment, and in offering their ſervices.

CHAP.

CHAP. X.

Dalecarlia—Memorials of Guſtavus Vaſa—Oernetz—Copper Mine of Fahlun—Cataract of the Dahl—Geſle—Loefſta—Iron Mine of Danemora—Paſſage from Griſleham to Abo—Fortreſs of Sveaborg.

THE province of Dalecarlia may be called the claſſical ground of Sweden, being full of memorials, which indicate the veneration of the natives for the memory of their deliverer, Guſtavus Vaſa, the greateſt man whom Sweden, fertile in great men, ever produced, if we eſtimate the greatneſs of his actions by the ſmallneſs of the means.

It was not without infinite pleaſure that I recognized, during this day's journey, the ancient ſilver mine, in which this father of his country lay concealed, and in which he performed the work of a common miner

with

with ſuch perſeverance and alacrity, expecting the lucky moment when he might emerge from his obſcurity.

As I ſtood on the brink of the mine, I figured to myſelf the Swediſh patriot, exciting by the moſt animated expreſſions and geſtures the Dalecarlian mountaineers to deeds of glory, and iſſuing from this ſubterraneous priſon the avenger of oppreſſion, and the deliverer of his country.

Of all the places moſt remarkable in the life of Guſtavus, and moſt curious as a memorial of that great man, is Oernetz, the houſe belonging to Paterſon, in which Guſtavus took refuge, where his treacherous hoſt, after receiving him with every apparent demonſtration of joy and affection, would have betrayed him to the Danes, if his wife had not preſerved him from her huſband's treachery. This very identical houſe now exiſts in its original ſtate. It is built of wood, painted red, and covered with ſhingles.

We aſcended a ſpiral ſtair-caſe, with a gallery on the outſide of the houſe, and entered

tered the bed-chamber in which Guſtavus was concealed. The bed in which he ſlept is a barrack wainſcot bedſtead with a ſtraw mattraſs, but has been ridiculouſly hung with curtains of blue purple cloth, ornamented with the three crowns, the arms of Sweden, as if any pomp of clothing could add to a piece of furniture, which derives its only merit from its antiquity, and from the memory of Guſtavus Vaſa.

The inventory of this apartment is exceedingly curious, and conſiſts of the following particulars:

The figure of Guſtavus Vaſa in complete armour; his under-garments of blue velvet, laced with gold, the ſame which he wore when he was alive; his bow and arrows, wallet and ſnuff-box, and his bible, printed at Upſala in 1541. The figures of two Dalecarlians in their ancient dreſs, and armed with weapons common in the ſixteenth century. Their clothes and ſtockings are of white cloth; their hats high crowned, and peaked at top, with large flat rims, not unlike mother Shipton's; a leather girdle round

round their waiſts, to which are hung two knives in a leathern caſe, the ſame as are ſtill carried by the Swediſh and Norwegian peaſants; an iron crow for drawing the ſtrings of their croſs-bows, and a kind of tinder-box; in their right hands, a croſs-bow, and on the left ſide a quiver of undreſt leather filled with arrows. One of theſe figures is that of Jacob Jacobſon, the ſtable boy, who conveyed Guſtavus to the curate's houſe at Swartzio, when he eſcaped from Oernetz; another, that of the peaſant who tendered him ſome aſſiſtance when travelling in the foreſt; a third, is the guide, who, in conducting him through the foreſt, robbed and left him in the greateſt diſtreſs, but afterwards amply compenſated for this act of treachery by joining him, when the Dalecarlian peaſants revolted in his favour, and by the bravery and fidelity of his ſubſequent conduct.

On the ſtair-caſe leading to this apartment is the privy, down which Guſtavus deſcended when he eſcaped from Oernetz. On beholding this privy I ſhuddered, as if

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the fate of Sweden now depended on his eſcape.

The ſituation of Oernetz, on the borders of a large lake, and in an undulating country, enriched with much wood, is ſufficiently delightful to attract the traveller's notice, even if it did not contain memorials of ſo great a ſovereign as Guſtavus Vaſa.

Having ſatisfied our curioſity at Oernetz, we continued our journey through a hilly and rocky country, ſcantily provided with trees, but abounding in mines, to Fahlun. As we approached this town, we were much ſtruck with the deſolate appearance of the environs, and the numerous furnaces ſmoking and infecting the air; while on the other ſide the eye was relieved from this dreary ſcene with the view of the lake Run, interſperſed with numerous iſlands.

Fahlun is ſituated in the midſt of rocks and hills, between the two large lakes of Run and Warpen. It contains 1200 houſes, and including the miners, 7000 inhabitants. Excepting two churches of brick, roofed with copper, and a few other houſes of the

ſame

ſame materials, the buildings are principally of wood, and of two ſtories.

The copper mine, which gives exiſtence and celebrity to this town, is on its eaſtern ſide. Although the time of its firſt diſcovery cannot be aſcertained; yet its great antiquity is proved by its being mentioned in the earlieſt records of Sweden, and particularly in the charter of Magnus Smek, which renews its privileges, and conſiders it as exiſting from time immemorial; from which we may fairly conclude it muſt have been worked eight or nine hundred years ago.

The mine is private property, and is divided into 1200 ſhares; each whereof is worth 150 rix-dollars, or £. 37. 10s. Four times in the week the ore is divided in the following manner: Eleven equal heaps are formed; eight are diſtributed among eight of the proprietors; the three remaining heaps are ſold by auction; of theſe, one is appropriated to the repairs of the works; the ſecond to pay the ſalaries of the miners and the other workmen; the third formerly belonged

longed to the king; but has been lately relinquiſhed by his majeſty, and is now employed in defraying the expence of making new excavations.

In this manner the ore is equally divided, until the whole number of proprietors have had their reſpective ſhares, and then the rotation begins again.

The ore is firſt roaſted in the open air in order to deprive it of its ſulphur, and then ſmelted, and this operation of roaſting and ſmelting is repeated five ſucceſſive times. It is then brought to the public office, weighed, and divided in the following manner: Of twenty parts the proprietors receive ſixteen, the crown two and an half, and the remaining one and an half is appropriated towards the machinery of the mines, and other incidental expences. Each proprietor receives at the office a receipt for the quantity of copper he has delivered in; and this receipt he either ſells, or the copper is tranſported at the common expence to Arfweſtadt, where it is refined and worked into plates.

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The copper is not found in veins, but in great maſſes, and does not extend more than an Engliſh mile in circumference. The matrix of the ore is the ſaxum of Linnæus, or rock, and pyrites of iron. The richeſt part of the ore may perhaps yield 20 per cent. of copper; but as the poor and the rich parts are blended, they give only 2 per cent. when firſt brought from the mine, and 12 per cent. when once ſmelted.

Large quantities of copper are alſo annually obtained, by placing numerous pieces of iron into troughs of water, impregnated with blue vitriol, by a proceſs extremely ſimple and very common in chymical experiments, but which has led ignorant perſons to believe, that the iron is changed into copper. The water having a greater affinity with iron than with copper, diſſolves the iron particles, and lets drop a proportionate number of particles of copper before held in ſolution, which aſſume the places of the particles of iron recently diſſolved; and as this operation is continual

and gradual, the pieces of iron in time are ſo entirely covered with the particles of copper as to appear to have been converted into that metal.

Twelve hundred workmen are employed; namely, ſix hundred miners, and the ſame number in roaſting and ſmelting the ore, in making charcoal, and other works above ground.

The morning after our arrival at Fahlun, we viſited the mine, and deſcended as far as we could penetrate. The mouth or opening is extremely large, perhaps the largeſt in the world, being 1,200 feet in diameter, or near three quarters of an Engliſh mile in circumference: an immenſe chaſm, gradually enlarged to its preſent ſize by the excavations and frequent downfalls of the rock.

We deſcended this chaſm by ſeveral flights of wooden ſteps, till we arrived at the entrance of the firſt ſubterraneous gallery; from whence the deſcent is extremely commodious, not by ladders, as is uſual in

mines,

mines, but down ſteps cut in the rock, and ſloping ſo gently as to be practicable for the horſes employed in bringing up the ore.

I will not deſcribe the miners naked from their waiſt upwards, and compare them, as they are carrying in their hands ſmall bundles of lighted ſlips of wood, to the Cyclops; nor will I dwell on the ſublimity of thoſe tremendous ſounds formed by the exploſion of the gunpowder, circumſtances common to all mines, and not peculiar to this of Fahlun.

The galleries along which we paſſed are from ſix to ten feet high, and ſufficiently ſpacious. The perpendicular depth of the mine from the top of the chaſm is 1,020 feet, and 720 from the entrance into the ſubterraneous gallery to the bottom. The commodious ſtair-caſe continued till we came to a deep pit, to which we deſcended by means of a wooden ladder, and afterwards by an iron ladder looſely ſuſpended along the ſides of the rock: ſtepping from thence to a wooden ladder, we reached the

loweſt part to which we could then arrive, as the loweſt pit was full of water.

Our aſcent, from its length, was long and tedious, and we employed near four hours before we again iſſued into day.

The country from Fahlun to Gefle, through the provinces of Dalecarlia and Geſtrike, is as agreeable as any parts we have traverſed in Sweden, being richly diverſified with an alternate ſucceſſion of foreſts, rocks, hills and dales, uplands and plains, paſture and arable land, lakes and rivers. But the beauty of the landſcapes was more particularly heightened by the Dahl, the fineſt river in Sweden, which we croſſed ſeveral times, and coaſted its banks, as it flows through a rich and fertile plain. Gefle, the fartheſt northern point in Sweden to which we puſhed our journey, lies in the 63d degree of north latitude, and in the 17th degree of longitude, eaſt from Greenwich. The town is waſhed by three branches of the river Gefle, which begins here to be navigable for veſſels drawing nine or ten feet of water,

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and falls in a ſhort diſtance into a bay of the Baltic. Many of the houſes are conſtructed of brick or ſtone plaiſtered white, and have a neat appearance. The remainder, as is uſual in this country, are of wood. Gefle is the moſt commercial town in theſe northern parts of Sweden. Its exports are principally iron, pitch and tar, and planks.

A few miles from Gefle, we ferried over the Dahl to Eſcarleby, and walked to the celebrated cataract formed by that river, well deſcribed by Mr. Wraxall in his Northern Tour. The Dahl flows for ſome way in a broad and tranquil ſtream, until its courſe is interrupted by a ridge of rock and a high iſland about a quarter of a mile in circumference, which ſeparates its waters into three principal parts, as they daſh with unceaſing fury, and form a cataract ſcarcely inferior to the fall of the Rhine at Schaffhauſen. The iſland divides the cataract into two principal falls, of which the eaſtern fall is the fineſt.

In winter, or when the river is ſwoln with violent rains, the waters of the eaſtern

fall cover the whole ridge from the extremity of the iſland to the banks, and muſt be much leſs pictureſque than as we ſaw it, broken into different falls by numerous crags which ſtart up in the midſt of the deſcending deluge. The breadth of the river from ſhore to ſhore is near a quarter of a mile, and the perpendicular height of the fall between thirty and forty feet.

The river ruſhes at the bottom in a narrow channel ſcarcely a hundred feet broad, ſtruggling for vent with unceaſing fury, and foaming at the foot of the iſland, covered with pines, which overhang the abyſs, "ſilent and aſtoniſhed ſpectators of the glorious ſcene *."

Words muſt be always deficient in endeavouring to deſcribe a large river, pouring its flood of waters from the rocks, roaring with the noiſe of thunder, and ſcattering its foam on the impending woods: neither the pencil or poetry are adequate to the deſcription.

* Wraxall's Northern Tour, p. 158.

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The next morning we arrived at Loefſta, the ſeat of Baron Geer, and remarkable for the iron founderies belonging to that nobleman. The houſe, with the numerous buildings ſurrounding it, appears like a royal palace, while the uniform rows of brick cottages, inhabited by the inſpectors and workmen of the forges, architects, ſmiths, and carpenters, reſemble a ſmall town. Here are four founderies, at which not leſs than 1,500 men are employed. The iron is brought from the mine of Danemora, of which the third part is the property of the baron. The ore is firſt calcined, then reduced to powder, next melted, and poured upon the ſand in large quantities, weighing each from 120 to 160 pounds. In this ſtate it is alternately heated and hammered five or ſix times, until it is made into bars of iron fit for exportation. Each bar is from 12 to 18 feet in length, from three-fourths of an inch to eight inches broad, and from one-half to three-fourths of an inch thick. Theſe forges of Loefſta prepare annually from 6,000 to 8,000 ſhippund, or from 800 to 1,066 ton.

It is ſold at eight rix-dollars, or £. 2, per 20 pound, and exported to England for our ſteel manufactures, the Danemora iron being eſteemed the fineſt in the world. As it is exported from Oregrund, an adjacent port in the Baltic, it is uſually known in England by the name of the Oregrund iron.

Upon our arrival at Loeffſta, we carried a letter of recommendation from Mr. Arweſon to Baron Geer, and, as the baron was ſhooting, received an immediate invitation to dine with his lady; for ſuch is the hoſpitality of the Swedes, that any traveller who brings a letter of recommendation is immediately invited to dinner, and is almoſt deemed guilty of incivility if he does not accept the invitation.

After a ſumptuous dinner, we continued our journey towards Danemora, which ſupplies the iron for the forges of Loeffſta, and arrived the ſame evening at Oſterby, the adjacent village, where we took up our abode in a very comfortable inn. The next morning we carried a letter of recommendation

to

to Mr. Grill, who has a large property in the mines of Danemora, an excellent houſe, and three forges. Mr. Grill kindly reproved us for not coming to his houſe the preceding evening; and, though he was that inſtant ſetting off for Stockholm, inſiſted upon our dining at his houſe with his niece, and a ſelect company who were there upon a viſit.

After dinner we walked to the mines, which ſeem to differ from all other mines, inaſmuch as they have no ſubterraneous galleries, but are worked in the open air.

The pits are deep excavations, like gravel pits, and form ſo many abyſſes or gulphs. The deſcent is not, therefore, as is uſual in mines, down a narrow ſubterraneous ſhaft. Here I ſtepped into a bucket, and hung ſuſpended in the open air, in the ſame manner as if a perſon was placed in a baſket at the top of Saliſbury ſpire, and gradually let down to the ground by a rope and pully. The inſpector accompanied me to the bottom; and while I was placed at my eaſe in the inſide upon a chair, ſeated himſelf on

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the rim of the bucket with his legs extended to maintain the equilibrium. He had in his hand a ſtick, with which he gently touched the ſides of the rock and the rope of the aſcending bucket, in order to prevent our bucket from ſwerving againſt them, which muſt have infallibly overſet us.

While I hung ſuſpended in mid-air, and ſo giddy that I could not venture to look down, I obſerved three girls ſtanding on the edge of the aſcending bucket, and knitting, with as much unconcern as if they had been on terra firma; ſuch is the effect of cuſtom! We were about five minutes in deſcending; and the depth which we reached, before I ſtepped out of my aerial ſeat, was 500 feet. Not being a mineralogiſt, my curioſity was ſoon ſatisfied; I again got into the bucket, and was drawn up in the ſame manner.

In this ſituation I cloſed my eyes, and converſed in Latin with the inſpector. He informed me, that the richeſt ore yields 70 per cent. of iron, the pooreſt 30; that, upon an average, the collective maſs gives one-

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third of pure mineral; that about 12,000 tons are annually drawn from the mines, which yield about 4,000 tons of bar-iron.

The maſs of ore occupies a ſmall compaſs. The length of the pits conſidered as one is 760 feet, and the breadth from three to twelve. The ore runs in veins from eaſt to weſt. The richeſt ore is near 500 feet in depth; and the Storoe Grube is not yet fathomed. The matrix of the ore, being a calcareous earth, conſequently contains but little ſulphur, which is perhaps the reaſon of its ſuperior quality.

The mines of Danemora, ſo renowned for yielding the fineſt iron in the world, the greateſt part of which is ſent to England for the uſe of our ſteel manufactures, were diſcovered in 1488. They conſiſt of twelve pits.

The mines belong to thirteen proprietors; of whom Baron Geer poſſeſſes more than one-third. The proprietors work each pit ſeparately, defray the expences, and divide the profits according to their reſpective proportions.

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The ore, which is dug in the ſummer, is laid out in heaps, and divided in the winter months, from November to March, when it can be conveyed on ſledges. Each of the proprietors ſend it to their reſpective forges, or ſell it on the ſpot.

Near three hundred perſons are employed in mining and in tranſporting the ore. The miners are paid by the work, and can gain at moſt 1 *s.* 3½ *d.* per day, the others can earn 1 *s.* 1 *d.*

The water is drawn out of the pits by means of pumps worked by water. Theſe pumps are of great length, and occaſion conſiderable expence for repairs. A ſteam-engine was once employed for this purpoſe, but obliged to be laid aſide on account of the ſcarcity and dearneſs of charcoal.

From Danemora we continued our journey to Upſala and Stockholm; and after a few days proceeded towards Ruſſia, acroſs the gulph of Finland, by the paſſage from Griſleham to Abo.

The numerous ſhoals and rocky iſlands render this paſſage extremely dangerous at

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all ſeaſons of the year, whenever the wind is high or the ſea rough; and this danger is increaſed by the unſkilfulneſs of the ſailors, and the frail condition of the open boats employed on theſe occaſions. In my ſecond expedition into the north, in 1784, I paſſed from Griſleham to Abo, and was again expoſed to ſome difficulties.

October 16. We embarked at Griſleham at ſix in the morning, and a favourable breeze carried us in leſs than three hours and a half to the ſmall iſle of Eckeru, diſtant about 36 miles from the coaſt of Sweden. From Eckeru we ferried over the bay of Markſund to Fredenby, on the iſle of Aland, and croſſed that iſland to Bomarſund, a ſmall village at its eaſtern extremity. From that place there are two paſſages to Abo; the one is to ferry over the ſeveral ſtraits and firths to Kumlinge, Brando, and ſeveral other ſmall iſlands, to the continent of Finland, about ſix miles from Abo; the other is to proceed the whole way by ſea from Bomerſund to Abo. As the removal of our carriage from the ſeveral boats at the numerous

merous ferries would have been attended with unavoidable delays in the former paſſage, we preferred the latter, and accordingly hired two open boats to convey us directly to Abo.

The next morning we embarked at ſeven, and were expeditiouſly carried forwards by a ſide breeze. But as the wind blew freſh, and the ſea ran high, a Swediſh gentleman, whom we had accidentally met at Griſleham, and who had deſired to accompany us to Abo, was ſuddenly alarmed; and communicating his fears to the boatmen, prevailed upon them to land upon Long Iſland, about four miles from Bomerſund. Here they continued three hours upon the beach, reſiſting all our importunities and offers to induce them to proceed. The wind at length ſomewhat abating, they were prevailed upon to ſet ſail; but in a ſhort time the ſailors (if they deſerve that appellation) were ſoon again ſeriouſly alarmed, and their panic was ſtill farther increaſed by the terrors of the Swediſh gentleman, who, like Gonzalo in the Tempeſt, " would have given a thouſand

ſand furlongs of ſea for an acre of barren ground, long heath, brown furze, or any thing."

At length, the maſt cracking towards the bottom, the boatmen took down the ſail, and put in at a little iſland, or rather rock, where we all landed.

It was now two o'clock; and as the ſailors declared their reſolution of not venturing again to ſea till the wind abated, we had the proſpect of paſſing the night on this dreary ſpot. We accordingly examined our ſtation. It was a ſmall rocky iſland of red granite, about a quarter of a mile in circumference, yielding a few blades of ruſſet-graſs, and twenty or thirty ſtubbed trees; expoſed on all ſides to "the pitileſs winds," and ſurrounded by inhabitable crags ſtarting up in the midſt of the daſhing waves.

Having landed our proviſions, we made a comfortable meal on ſome cold ham and chicken, collected ſome branches, kindled a fire, and felled two trees, in order to ſupply us with fuel during the cold night we were

preparing to paſs in ſo deſerted a ſpot. Towards evening, however, we fortunately overcame the obſtinacy of the boatmen, and prevailed upon them by importunities and money to re-embark before it was duſk: but as they were apprehenſive of truſting their little bark to the open ſea as far as Kumlinge, the neareſt habitation in the way to Abo, they returned to Long Iſland, and landed us about ſeven at a neat village called Oſterwick, where we found good beds and tolerable accommodations, greatly enhanced by comparing our ſituation with that of the deſert iſland we had recently quitted, on which we expected to have paſſed a moſt comfortleſs night.

The next morning a gentle but favourable breeze carried us above ſeventy miles; through narrow ſtraits, between numerous iſlands, and rocky coaſts, wild yet ſprinkled with trees, to a ſmall village on the peninſula of Finland, about two miles from Abo.

One of the moſt curious and important fortreſſes in the Swediſh dominions, and perhaps in Northern Europe, is Sveaborg, ſituated

ſituated near Helſingfors in Finland. In my former tour we were not permitted to viſit this fortreſs for want of an order from the court; but we were more fortunate in this ſecond journey through theſe parts; his Swediſh majeſty himſelf having condeſcended to command the prime miniſter, Count Creutz, to give us an order for that purpoſe. In conſequence of this paſſport, the governor of the fortreſs ſent his boat to convey us to the fortreſs, and did us the honour to accompany us himſelf round the works, and to point out what was moſt remarkable.

About three miles and an half from the town of Helſingfors are ſeveral ſmall rocky iſlands in the Gulf of Finland, which compoſe the fortreſs of Sveaborg. They have been lately fortified, in order to maintain a fleet in conſtant readineſs to ſail, and to contain a garriſon in caſe Finland ſhould be invaded.

The iſlands, which compoſe this fortreſs, are ſeven in number, and all lie within the circumference of four miles, in the follow-

ing direction: 1. Long-ön, or Long Iſland, lies S. W. and is the neareſt to Helſingfors; it is 600 feet in length, and 300 in breadth. 2. Waſter Swart-ön, or Weſt Black Iſland, S. E. of Long-ön; 1,400 feet in length, and 800 in breadth. 3. Lilla Swart-ön, or Little Black Iſland, Eaſt of Waſter Swart; 800 feet ſquare. 4. Oſter Swart-ön, or Eaſt Black Iſland, Eaſt of Lilla Swart; 3,000 feet in length, and 1,600 in breadth. 5. Warg-ön, or Wolf's Iſland, lying in the center between Waſter and Lilla Swartz-ön; 2,400 feet in length, and 2,000 in breadth. It is the principal iſland, and contains the governor's houſe. 6. Guſtaf's Ward, or the Arms of Guſtavus, S. E. of Warg-ön; 1,600 feet in length, and 1,200 in breadth. 7. Skantz Landet, or Land-fortreſs, South of Guſtaf's Ward, an iſland as big as both Warg-ön and Oſter Swart-ön, but of which only 600 feet are to be fortified.

The project of ſurrounding theſe iſlands with fortifications was formed by General Ehrenſwald, and the work was begun in 1748. £. 750,000 have been already expended,

pended, and to complete the remainder will require above £. 500,000.

It is computed, that the whole might be finiſhed in about ſix years, if ſufficient money could be obtained for that purpoſe; but according to the ſlow manner in which the work is now carrying on, a century muſt elapſe before its completion.

The works are really ſtupendous and worthy of the ancient Romans. The walls of the fortifications are chiefly of hewn granite, covered with earth, and are from ſix to ten feet thick, and in a few places not leſs than 48 in height. The batteries, which begin upon a level with the water, and riſe in tiers one above the other in all directions, commanding the only channel through which large veſſels can ſail to Helſingfors, render the paſſage of the enemy's fleet extremely dangerous, if not impracticable.

In Warg-ön is a dry dock, which is capable of containing ten frigates. It is hollowed in the ſolid rock, is 800 feet long, 200 broad, and about fourteen deep. It is

divided into three equal parts by two brick walls, which run lengthways; each part contains four frigates, and may be closed with sluice-gates, so that each vessel lies separately from the others. The whole is covered with a wooden pent-house roof, in order to preserve the frigates from the rain. When I was there this bason contained eleven frigates, which, in case of war, would be removed by letting in the water, and opening the sluice-gates.

At one extremity of this dock is a small bason 200 feet square, closed at each end with sluice-gates, which serves for the entrance and exit of the frigates, and likewise for repairing or building ships. At the other extremity another bason was quite finished of the same dimensions with the former, for a man of war. This bason may likewise serve for the passage of the frigates, whenever the other is employed in repairing or building ships. The magazines for the ships stores and artillery are built close to the edge of the water, which is of sufficient depth to admit each vessel to lie close to the

quay,

quay, and be equipped without further trouble.

There is an excellent port for 70 ſhips of the line, and a ſmall harbour no leſs ſecure for ten frigates.

The garriſon, in the month of October 1784, conſiſted of 350 ſoldiers and 600 marines; but when the whole fortifications are completed, will require 12,000 men.

For the purpoſe of building ſhips at Sveaborg, the Swedes procure the oak from Gothland, part of the flax from Finland, hemp and maſts from Riga. Such, in October 1784, was the ſtate of the fortifications of Sveaborg; a fortreſs, which, even in its preſent unfiniſhed ſtate, will be capable of harraſſing the Ruſſians in caſe of a war, and which, if ever it ſhould be completed, may juſtly be called the Gibraltar of the north.

TRAVELS

INTO

RUSSIA.

BOOK XI.

CHAP. I.

Addition to the former Deſcription of St. Peterſburgh—Collection of Pictures in the Imperial Palace—Plan for the public Schools.

I Found St. Peterſburgh conſiderably improved ſince my former tour, and ſeveral of the public works, which, as they were carrying on, made many parts of the town appear like a quarry of ſtones, completed, and adding to the ornament and beauty of the capital.

The

The walls of the citadel were facing with hewn granite; the canal of Catharine was embanked with a wall and parapet of the ſame materials; and the canal of Fontanka, which is near two miles in length, were alſo embanked in the ſame manner, and ſtill further ornamented on each ſide with an iron railing.

The marble palace, which ſtands on the banks of the Neva, facing the citadel, was completed. Her majeſty gave this ſuperb edifice to prince Orlof; and at his death purchaſed it from his executors for £. 250,000. The ſtyle of architecture is magnificent but heavy. The front is compoſed of poliſhed granite and marble, and finiſhed with ſuch nicety, and in a ſtyle ſo ſuperior to the contiguous buildings, that it has the appearance of having been tranſported to its preſent ſpot, like the palace in the Arabian Tales, raiſed by the enchantment of Aladdin's lamp. It contains forty rooms on each floor, and is fitted up in a ſtyle of ſuch profuſion and ſplendour, that the expence of the furniture has exceeded £. 200,000.

A magnificent range of buildings has been added to the imperial palace. It joins to the Hermitage, and is ſo extenſive, that it may be called another palace. A ſuperb ſuite of apartments, chiefly occupied by the empreſs herſelf, contains the cabinet of pictures, which I found much finer than I had reaſon to expect.

This cabinet is principally compoſed of the following collections:

1. The celebrated collection of Crozat, at Paris, which vied with that in the palais royal belonging to the duke of Orleans. It conſiſted of more than 370 pieces, including various ſketches.

2. The ſmall but well choſen collection of Counſellor Tronchin, of Geneva; in which may be particularly noticed ſeveral by Teniers; and a Chriſt bearing the croſs, by Ludovico Caracci, half length, of the natural ſize; the countenance expreſſive of that meek dignity by which the founder of the Bologneſe ſchool has peculiarly characteriſed the Saviour of mankind.

3. The collection of Count Bruhl, re-

markable for twelve Woverman's; a Holy Family, by Vatteau; an Ecce Homo, by Michael Angelo Caravagio; a painter who ſucceeded in delineating ſimple nature and low life, but was extremely deficient in treating dignified ſubjects.

4. Part of the collection of the Chevalier Baudouin, purchaſed at Paris; the poſſeſſor reſerving to himſelf ſeveral landſcapes by the Dutch maſters, and Vernet. Among the pictures which came to the empreſs, I obſerved ſeveral excellent paintings by Rubens and Vandyke, particularly an ineſtimable head of Henry the Fourth, by Rubens; a Study after Nature, for the Luxemburgh gallery, greatly expreſſive of that vivacity and *bon-hommie* which characteriſed that amiable monarch; two, by Ferdinand Bol; ſeveral, by Rembrandt, in his ſtrong but uncouth manner; and two lovely groupes of children's heads, in the characters of angels, by the inimitable Corregio.

5. The collection of Houghton-houſe, the loſs of which every lover of the arts muſt ſincerely regret, and upon which I need not

not enlarge, as the pictures are well known, from the catalogue publiſhed by the honourable Horace Walpole, and from the engravings by Boydell.

6. A collection from Venice, containing ſeveral, by old Palma, Titian, Paul Veroneſe, and the Baſſans; many of which are, however, very doubtful whether they are originals.

Of the Roman ſchool the empreſs poſſeſſes four undoubted originals, by Raphael. 1. A Holy Family, in that great maſter's beſt manner, and in the higheſt preſervation. 2. Portrait of Cardinal Pole, alſo in his beſt manner. 3. A St. George, of which there is an engraving by Voſterman. Theſe three paintings from the cabinet of Crozat. 4. The Laſt Supper, an undoubted original, but in bad condition.

I muſt not omit an old and an excellent copy of the School of Athens, of which the original picture, for compoſition, correctneſs of deſign, and juſt delineation of character, ſtands unrivaled in the art of painting.

Several

Several fine landſcapes by Claude Lorraine, the painter of nature; and two delightful landſcapes by Gaſpar Pouſſin, in which that poetical painter, ſo remarkable for his pictureſque pencil, has delineated towers and battlements,

" Boſomed high in tufted trees;"

and in which he realizes the beautiful imagery deſcribed in the Penſeroſo of Milton:

" And when the ſun begins to fling
His flaming beams, me, goddeſs, bring
To arched walks of twilight groves,
And ſhadows brown that Sylvan loves
Of pine, or monumental oak,
Where the rude axe with heaved ſtroke
Was never heard the nymphs to daunt,
Or fright them from their hallow'd haunt."

By Salvator Roſa, the well-known picture of the Prodigal Son, from the Houghton collection; Democritus and Protagoras, not leſs celebrated; and ſeveral fine landſcapes.

Of the Bologneſe ſchool, two Guercinos, and ſeveral invaluable pieces by Guido Rheni.

ni. Beſides the celebrated picture of the doctors conſulting on the immaculate conception of the Virgin Mary, from the Houghton collection, I could not ſufficiently admire that delightful painting, known by the name of Les Couſeuſes, from the Crozat collection. That charming picture repreſents an aged governeſs ſuperintending ſeveral young women at work, who are models of perfect beauty, unaffected grace, and ſerene innocence. Theſe two paintings are of themſelves ſufficient to exculpate Guido from the cenſures of thoſe connoiſſeurs, who, judging haſtily from a few ſpecimens, indiſcriminately accuſe him of always ſacrificing too much to the graces, and of introducing affected attitudes.

The cabinet contains alſo a few pictures by Battoni and Mengs, in whom the genius of the Roman ſchool ſeems to have expired. Of Battoni, Thetis approaching Charon with her infant Achilles aſleep is not without merit.

Three pictures by Mengs deſerve to be mentioned: 1. Perſeus and Andromeda, in

which

which that painter has erred againſt *coſtume*, by repreſenting the hero naked, and Andromeda half clothed. The author varied ſomewhat from his original deſign, which was an exact copy of the baſſo relievo of the Fauſtina, on the pedeſtal of a column at Rome, and on which is engraved, Pietro Santo Bartoli. With reſpect to the drapery, Mengs ſeems to have adopted that from the gem of Callyrrhoe, the Bacchanalian Woman. 2. The Judgment of Paris, a very fine picture. 3. St. John preaching in the wilderneſs, a ſingle figure; his air and motion are dignified. Mengs finiſhed this picture for his friend M. de Liana, formerly envoy to the court of Parma.

In order to diſtinguiſh St. John, the artiſt drew on one ſide of the picture the head of a ſheep badly executed. Mengs having copied this picture for a friend, omitted the ſheep's head, and inſerted in its place a trunk of a tree, which had a pictureſque effect. The St. John, in the empreſs's collection, is a third copy of the ſame ſubject; the figure, though of a ſmaller ſize, being the

ſame as in the two former, and the ſheep's head is omitted. Mengs has not in this inſtance alone re-copied his figures. He painted his own portrait for Mr. de Saphorin, and from this picture he made ſeveral copies; one he ſent to the gallery of Florence, a ſecond is at Turin, a third at Madrid, and a fourth in the poſſeſſion of his friend, Mr. Azara, at Rome.

This circumſtance ſufficiently ſhews, that the great maſters frequently copied their own works; and proves the poſſibility of finding ſeveral paintings in the different collections, which, although exactly the ſame, are equally originals. In general the maſter orders his beſt ſcholars to copy the outlines, which he corrects and re-touches. The ſcholars then ſketch the remainder, and the maſter reviſes and finiſhes the whole.

The queſtion, which is the original? is frequently puerile; for ſometimes the ſecond is better and more ſtudied than the firſt. Indeed, when the painter employs his ſcholars too much in theſe copies, as Rubens was accuſtomed to do, the perfection

of

of the original uſually ſuffers by theſe frequent repetitions; as the haſty touches of the maſter cannot correct the defects of the ſcholars.

It is a well-known anecdote, that Raphael himſelf miſtook a copy of one of his own pictures, done by Andrea del Sarto, for the original. Three paintings of his celebrated John the Baptiſt are now exiſting, of which it is impoſſible to diſcover which is the fineſt, or which is the original. One of theſe is in the great duke's gallery at Florence, a ſecond in a private collection at Rome, and the third in the palais royal at Paris.

Under the ſame circumſtances may alſo be mentioned the celebrated portrait of Lord Strafford dictating to his ſecretary, of which I have ſeen three, one at Wentworth houſe, the ſecond at Wentworth caſtle, and the third at Blenheim.

The empreſs continues to proſecute her great plans for the interior civilization of her vaſt empire with unwearied zeal. But of all the plans formed by her majeſty for this

this purpoſe, there is none more uſeful and praiſe-worthy than that for the eſtabliſhment of ſchools in every government, formed on the moſt comprehenſive ſcale and liberal principles.

An academy is eſtabliſhed at St. Peterſburgh for the inſtruction of 200 ſtudents, deſigned to be maſters of the provincial ſchools. This academy is provided with profeſſors of hiſtory, mathematics, rhetoric, and natural hiſtory; with a German maſter, and a drawing maſter.

The ſtudents are ſelected from the different ſeminaries of the Ruſſian empire, and, as they have received their education as prieſts of the regular clergy, underſtand Latin. They are twenty years of age, and are to remain at Peterſburgh three years; during which period they are inſtructed in hiſtory, geography, the various branches of natural philoſophy, and natural hiſtory. They are all boarded, lodged, and inſtructed at the empreſs's expence.

At the concluſion of this term their places are to be ſupplied by others, and they will be

be diſtributed in the different parts of Ruſſia. Two of theſe ſtudents will be eſtabliſhed in the principal town of each government; one as teacher of mathematics, the other of hiſtory, geography, and natural hiſtory. Each ſtudent, thus eſtabliſhed, is to inſtruct other ſtudents as preceptors of the ſmaller ſchools in the leſſer towns.

The regulation of this uſeful eſtabliſhment is entruſted to a committee conſiſting of five members, who have the ſuperintendance of the whole.

Thus the great ſchools in the principal towns will depend on the academy of Peterſburgh, and each ſchool in the ſmaller towns on the principal ſchool in each government; a ſcheme which, if it can be carried into execution, will be moſt effectual in promoting the interior civilization of this vaſt empire. But it is to be feared, that theſe great plans of interior civilization and improvement have been interrupted by the expenſive war with Turkey and Sweden.

CHAP. II.

Additional Remarks on the Population, Revenues, and Army of Ruſſia.

IT was not without the utmoſt diffidence, that in my former volumes * I ventured to attempt conveying a general idea of the population of the Ruſſian empire, without having been able to procure any certain documents upon ſo complicated a ſubject.

Having fortunately obtained, during my ſecond journey to Ruſſia, the following table of the peaſants aſſeſſed by the poll-tax, in 1782, I can now lay before the reader, with greater confidence, a more exact ſtatement of the inhabitants which compoſe the Ruſſian empire; and can feel myſelf juſtified, that in my former account I did not exaggerate, but rather decreaſed their real number.

* Book VI. Ch. i.

It

It is neceſſary to obſerve, that by a late regulation the peaſants of Livonia, and of the Ukraine, and of the provinces conquered from Sweden, now pay the poll-tax, which enables us to aſcertain their numbers with a greater degree of certainty.

LIST of the Peaſants paying the POLL-TAX in the ſeparate Governments.

Government of Moſcow - -	440,359
St. Peterſburgh -	283,295
Wiburgh - -	88,128
Tver - - - -	446,321
Novogorod - -	269,320
Pſkof - - -	288,125
Smolenſko - -	445,257
Mohilef - - -	331,033
Polotzk - - -	311,462
Orel - - -	462,520
Kurſk - - -	458,830
Karkof - - -	392,944
Voronetz - -	394,934
Tambof - - -	438,025

Government of	Refan - - -	434,679
	Toola - - -	418,927
	Kaloogha - -	384,423
	Yaroflaf - - -	370,961
	Vologda - - -	349,386
	Volodimir - -	433,820
	Koftroma - -	396,269
	Nifhnie-Novogorod	398,317
	Viatka - - -	407,950
	Perm - - -	373,252
	Tobolfk - - -	166,225
	Kolyvan - - -	39,297
	Irkutfk - - -	123,232
	Ufa - - - -	177,798
	Simbirfk - -	361,159
	Kafan - - -	373,354
	Penfa - - -	318,076
	Saratof - - -	282,817
	Aftrachan - -	23,776
	Afof - - - -	177,849
	New Ruffia - -	210,539
	Kiof - - -	387,792
	Tchernighof - -	368,099
	Novogorod Sieverfki	365,541
	Riga - - -	263,525

Government

Government of Revel - - -	99,564
Sum total of peaſants paying the Poll-tax - -	12,757,180

By doubling this number for the females, we have for the peaſants, male and female, in the whole Ruſſian empire - 25,514,360

To this we muſt add nobles -	200,000
Clergy and their families -	120,000
Merchants and families - -	250,000
Natives of Crim Tartary and the Kuban - - -	80,000
Wandering hordes of Siberia -	600,000
And the total population of the Ruſſian empire will, according to this calculation, be - - -	26,764,360

A number, however large, greatly diſproportioned to the extent of the empire.

Since I gave alſo to the public the general

account of the Ruſſian Revenues *, ſeveral changes have taken place in the aſſeſſment of the poll-tax; and ſome augmentations have been made in the other branches of the revenue, which it will be neceſſary to mention and explain, in order to form a more accurate ſtatement of the Ruſſian finances, which my ſubſequent travels enabled me to collect.

But firſt it will be proper to premiſe, that in my former work, when I reduced the Ruſſian money to the Engliſh ſtandard, I eſtimated the average value of the rouble at 4*s.*; and conſequently five roubles at a pound ſterling, which, in 1776, when I firſt viſited Ruſſia, was the average value.

When Peter the Great reformed the coinage, he propoſed making the value of a rouble equal to a rix-dollar, or about 4*s.* 6*d.*; at which value, with a ſmall fluctuation, owing to accidental circumſtances, it continued till the commencement of the Turkiſh war in 1770. Since that period

* Book XI. Ch. vi.

the

the alteration of the coin has reduced the intrinſic value, as tried in the mint of London, to 3*s.* 2*d.* The exceſs of the imports above the exports, the number of remittances neceſſary for the payment of the troops employed againſt the Turks, and the great quantity of paper money in circulation, have alſo ſtill farther contributed to diminiſh the value of the rouble in exchange with foreign countries; and in the courſe of 1789, the rouble has been more than once ſo low as 2*s.* 4½*d.* and its preſent value, in 1790, ſcarcely exceeds 2*s.* 6*d.*

But as this diminution is owing to circumſtances not permanent in their nature, it may be preſumed, that at the termination of the war the nominal value will, as in moſt caſes, ſoon exceed the intrinſic value of the rouble, we may therefore fairly rate the average value at 3*s.* 4*d.* or ſix to a pound ſterling.

In my former account, for the year 1776, I ſtated the amount of the Ruſſian revenue in time of peace, at £. 6,144,968, or, as I

then eſtimated a pound ſterling as only equal to five roubles, at 30,724,840 roubles.

Since that period the revenue has been conſiderably augmented in the following articles:

Firſt, In regard to the poll-tax.

This aſſeſſment, which was not levied in the Ukraine and the provinces conquered from Sweden, namely, Livonia, Eſthonia, Ingria, and Carelia, now compriſed within the governments of St. Peterſburgh, Revel, Riga, and Wiburgh, was, in 1782, extended to thoſe parts of the Ruſſian empire; and the other taxes paid by the peaſants were aboliſhed.

This alteration has greatly benefited the public revenue; and the poll-tax is conſiderably more productive than before, not only from this circumſtance, but alſo from the increaſe in the number of peaſants ſince the reviſion of 1764. And as ſome peaſants are aſſeſſed at more than two roubles, and others at leſs than one rouble, we may perhaps place the average tax paid by each peaſant at a rouble and a quarter. From

this computation the poll-tax produces 15,435,000 roubles, or nearly double its former produce.

Secondly, The cuſtoms have been conſiderably increaſed; thoſe of Narva, Riga, Revel, and Archangel being placed upon the ſame footing as thoſe of Peterſburgh, and additional duties having been laid on the exports and imports.

From theſe and other augmentations we may venture to give the following ſtatement of the Ruſſian revenues in time of peace.

	Roubles.
Poll-tax - - -	15,435,000
Cuſtoms - - -	5,000,000
Salt - - - -	2,000,000
Gold and ſilver from the mines, profits of the coinage, and duty on iron at the forge -	3,395,910
Farm of ſpirituous liquors -	10,000,000
Church lands - -	2,000,000
Duties on ſales of lands and houſes, ſtamped paper, on mills, horſes, baths, ſhops, poſt-	

poſt-office, and other duties omitted - - -	4,000,000
Roubles -	41,830,910

Or, eſtimating the rouble at 3*s.* 4*d.* at £. 6,938,485.

But while we ſtate the augmentations of the revenue, we muſt likewiſe not omit the increaſe of the expenditure ſince 1776, by the eſtabliſhment of the new governments, and the foundation of the public ſchools, which cannot be eſtimated at leſs than 5,000,000 roubles, or nearly £. 800,000.

The account of the Ruſſian army, in my former publication, was ſtill more defective than the ſtatement of the population and finances; and, in my ſecond tour, it was not without the greateſt difficulty I could procure the following liſt of the regular troops on the peace eſtabliſhment.

STATE

STATE of the RUSSIAN ARMY, 1785.

1 Regiment horſe guards.
3 Ditto foot guards.
Preobraſkinſky.
Iſmoilofsky.
Semenofsky.

This corps is called 10,000 men, but does not exceed 3,000, and probably never will.

1ſt Diviſion.

ST. PETERSBURGH AND PLESCOF.

1 Field Marſhal.
1 General in Chief.
4 Lieutenant Generals.
7 Major Generals.

	Number of men and officers.
1 Regiment, carabiniers.	
Pleſcof - -	942
1 Ditto, dragoons.	
St. Peterſburgh	1,872
Total cavalry -	2,814

INFANTRY.

INFANTRY.

	Number of men, officers included.	
2 Regiments, grenadiers.		
Life grenadiers	4,188	
Sophiiſk - -	4,188	
		8,376
14 Field regiments.		
Revel - -	2,094	
Beloverſkoy.	14	
Pleſverſkoy.		29,316
Koporſkoy.		
Archangel.		
Navaginſk.		
Reſan.		
Velikolutſki.		
Tinguinſk.		
Narva.		
Kexholm.		
Nevſſky.		
Staroſkolſk.		
Negomſk.		
Total 1ſt diviſion -		40,506

2d Diviſion.

2d Division.—UKRAINE.

1 Field Marſhal.
1 General in Chief.
3 Lieutenant Generals.
5 Major Generals.

	Number of men, officers included.	
1 Regiment, cuiraſſiers.		
St. George - - -		742
10 Regiments, carabiniers.		
Kiof - - -	942	
Tchernigof.	10	
Severſk.	——	9,420
Glukof.		
Sophiiſk.		
Lubenſkoy.		
Tver.		
Neyinſk.		
Staradubſk.		
Perejoiloff.		
6 Regiments, light horſe.		
Achtiurſk - -	1,083	
Kaſkoff.	6	
Sumſk.	——	6,498
Carried forward -		16,660

	Number of men, officers included.
Brought forward -	16,660
Oſtrogjſk.	
Duteroniſk.	
Soniſk.	
Total cavalry	16,660
7 Regiments, infantry.	
Tomſk - -	2,094
Sief.	7
Brianſk.	
Total infantry	14,658
Elitz.	
Riga.	
Suzdolſky.	
Polotſkoy.	
Total 2d diviſion -	31,318

3d Diviſion. M O S C O W.

1 General in Chief.
2 Lieutenant Generals.
4 Major Generals.

* 2 Regiments,

	Number of men, officers included.	
2 Regiments, carabiniers.		
Moſcow - -	942	
Roſtof - -	942	
		1,884
1 Regiment, cuiraſſiers.		
Cazan - - - - -		742
Total of cavalry -		2,626
7 Regiments, infantry.		
St. Peterſburgh } Grenadiers	4,188	
Moſcow - - }	4,188	
		8,376
Pennſkoy	2,094	
Yaroſlaf,	5	
		10,470
Alinopolſk.		
Toola.		
Caſan.		
Total infantry -		18,846
Total infantry and cavalry, 3d diviſion - - - - - -		21,472

4th Diviſion.

4th Diviſion.
EKATERINOSLAF AND CRIMEA.

1 Field Marſhal.
1 General in Chief.
5 Lieutenant Generals.
11 Major Generals.

	Number of men, officers included.	
1 Regiment, cuiraſſiers.		
Ekaterinoſlaf - -	742	
1 Regiment, carabiniers.		
Reſan - - -	942	
		1,684
9 Regiments, light horſe.		
Paulogratz - -	1,083	
Marinpolſk.	9	
Alexandriiſk.		9,747
Olivinpolſk.		
Kherſon.		
Conſtantinogratz.		
Tamiginſk.		
Pultava.		
Iſiamſk.		
Total cavalry -		11,431

INFANTRY.

INFANTRY.

		Number of men, officers included.	
11 Regiments.			
Ekaterinoſlaf	} - -	4,188	
Tauritza -		4	
Phanagoriſk	} grenadiers.		16,752
Kiof - -			
Orlof - - - -		2,094	
Koſlof.		7	
Vialſkoy.			14,658
	Total infantry -		31,410
Kurſk.			
Tambof.			
Taurichetz.			
Troitzk.			
	Total 4th diviſion -		42,841

Corps cantoned from Aſtracan to Tiflis, making part of the 4th diviſion, commanded by

1 Lieutenant General.
5 Major Generals.

	Number of men, officers included.
2 Regiments, dragoons.	
Aſtracan - - -	1,872
Taganrock - - -	1,872
	3,744
9 Regiments, infantry.	
Aſtracan, grenadiers -	4,188
Kunitſk -	2,094
Kabardinia.	8
Moſcow.	16,752
Selenginſkoy.	
Nizof.	
Niezſhnie-novogorod.	
Butuirſkoy.	
Voronetz.	
Total -	24,684

5th Diviſion.

5th Division.—NOVOGOROD.

1 General in Chief.
1 Lieutenant General.
2 Major Generals.

	Number of men, officers included.	
1 Regiment, cuiraſſiers.		
Great Duke's	742	
1 Regiment, carabiniers.		
Kargopolſk	942	
		1,684
4 Regiments, infantry.		
Novogorod	2,094	
Siburg.	4	
Schluſſelburgh.	2	8,376
Tobolſk.		
Total 5th diviſion	10,060	

6th Diviſion.
VALODIMER AND VORONETZ.

1 General in Chief.
1 Lieutenant General.
4 Major Generals.

	Number of men, officers included.
2 Regiments, carabiniers.	
Jugermanland - -	942
Narva - - - -	942
2 Regiments, dragoons.	
Niſhnie-novogorod -	1,872
Volodimir - - -	1,872
4 Regiments, infantry.	
Shirvan - 2,094	
Roſtof. 4	
Apekeronſkoy. ——	8,376
Azof. ——	
Total 6th diviſion -	14,004

7th Diviſion.—SMOLENSKO.

1 General in Chief.
1 Lieutenant General.
3 Major Generals.

1 Regiment, life cuiraſſiers. -	742
2 Regiments, carabiniers.	
Jamburg - } 942 =	1,884
Riga - - }	
Carried forward -	2,626

		Number of men, officers included.
Brought forward	-	2,626
4 Regiments, infantry.		
Siberia, grenadiers	-	4,188
Smolenſko	- 2,094	
Uglits.	3	
Ingermanland.	——	6,282
Total 7th diviſion	-	13,096

8th Diviſion.—TAMBAF.

1 General in Chief.		
1 Lieutenant General.		
2 Major Generals.		
1 Regiment, light horſe.		
Elizabethgratz	-	1,083
4 Regiments, infantry.		
Troitzk	- 2,094	
Lodago.	4	
Volodimer.	——	8,376
Maromſk.		
Total	—	9,459

9th Diviſion.—WHITE RUSSIA.

1 General in Chief.
1 Lieutenant General.
1 Major General.

	Number of men, officers included.		
2 Regiments, dragoons.			
Smolenſko Kinburn	1,872	=	3,744
4 Regiments, infantry.			
Dnuperopſkoy Polotſkoy Tſchernigoff Vologolſkoy	2,094	=	8,376
Total -			12,120

10th Diviſion.—ORENBURG.

1 Lieutenant General.
2 Major Generals.

3 Regiments, light horſe.			
Voronetz - - Pſiumſk - - Ukraine - -	1,083	=	3,249
Carried forward -			3,249

	Number of men, officers included.
Brought forward -	3,249
2 Battalions, infantry.	
Orenburg - } Tschernogratz } 1,046 =	2,092
Total -	5,341

CORPS OF SIBERIA.

1 Lieutenant General.

2 Major Generals.

1 Regiment, dragoons.	
Siberia - - -	1,872
2 Battalions, infantry.	
Ekaterinenburg } Semiupolsk - } 1,046 =	2,092
Total -	3,964

LIGHT TROOPS.

12 Regts. regular Cossacks, of 942 men - - - -	11,304
irregular ditto, divided into	

regiments of 500 each from the Don and the Yaic or Ural (ſince Pugatchef's revolt) called Uralian Coſſacks—Number not to be aſcertained.

Kalmucks—The ſame.

2 Battalions, grenadiers.

Kharcofs -	1, 2	1,047	=	2,094

8 Battalions, Fuſileers.

Moſcow -	4	1,026	=	8,208
Kharkoff -	4			

24 Battalions, Chaſſeurs.

Tauritchitz	4	990	=	23,760
Caucaſus -	4			
Livonia -	4			
Bog -	4			
Beloruſky	4			
Finland -	4			

45,366

RECAPI-

RECAPITULATION.

	Cavalry.		Infantry.	Artillery.
1ſt Diviſion -	2,814	—	29,316	
2 - - -	16,660	—	14,658	
3 - - -	2,626	—	18,846	
4 - - -	11,431	—	31,410	
Lieut. Gen. Potemkin's corps	3,744	—	20,940	
5 - - -	1,684	—	8,376	
6 - - -	5,628	—	8,376	
7 - - -	2,626	—	10,470	
8 - - -	1,083	—	8,376	
9 - - -	3,744	—	12,120	
10 - - -	3,249	—	2,092	
Corps of Siberia	1,872	—	2,092	
Light Troops,				
Regular -	11,034	—	34,062	
Irregular -	—	—	—	
Artillery -	—	—	34,000	
	68,465		235,134	

To

To this may be added 98 garriſon battalions of different eſtabliſhments, conſiſting of recruits and invalids, mixed, which do the duty of the places, no field regiment, excepting four for the garriſon of Peterſburgh, and two for that of Riga, being employed in that line. The artillery has eleven garriſon battalions for the ſame purpoſe.

Computed Force of the Eſtabliſhment of the Ruſſian Army, 1785.

Guards, horſe and foot - - -	10,000
Regular cavalry - - - - -	69,465
Regular field infantry and artillery	235,134
Garriſon battalions, on an average, 500 each - - - - - -	49,000
Artillery ditto - - - - -	5,500
Total - -	369,099

Irregulars not included.

Such was the ſtate of the Ruſſian army upon paper; but the real number of effective men always falls far ſhort of this nominal

nal liſt. And although, conſidering the number of diſtant garriſons, the extent of the empire, and the difficulty of obtaining intelligence, it is impoſſible for a traveller to aſcertain the exact ſtate of the army, yet it is probable that the effective troops on the peace eſtabliſhment ſcarcely exceed 200,000; and it is remarkable, that notwithſtanding the ſum total of 369,099, the Ruſſians can ſeldom bring into the field more than 100,000 effective men.

CHAP.

CHAP. III.

Congelation of Quickſilver.—Dr. Guthrie's experiments to aſcertain the freezing point of mercury, and to prove that the purity or impurity of the mercury by no means affects its congelation.

AS the curious experiment of freezing quickſilver was firſt diſcovered at Peterſburgh by Profeſſor Braun, I was greatly deſirous of being a witneſs to the repetition of the ſame proceſs; particularly as many doubts had been entertained by ſeveral philoſophers, concerning the real congelation of *pure* quickſilver, and I had frequent opportunities of ſeeing this phænomenon during a ſeries of experiments made by Dr. Guthrie, phyſician to the Imperial Corps de Cadets.

Having inſerted a tube containing ſome quickſilver in a mixture of ſnow and ſpirit of

of nitre, he took it out in about ten minutes, and placed it in a ſecond mixture, and in about five minutes the quickſilver was perfectly congeled. The tube being broken, the quickſilver appeared in a ſolid maſs like a ball of ſilver, and being ſtruck with a hammer was flattened into twice its extenſion before it broke and liquefied.

But as the hammer was much warmer than the frozen quickſilver, it immediately melted the parts which it touched, ſeeming to have the ſame effect upon the mercury as a warm iron would have upon wax. I deſired, therefore, Dr. Guthrie to place the hammer alſo in the freezing mixture, ſo as to acquire the ſame degree of cold as the frozen quickſilver. Another portion of quickſilver being congeled by the ſame proceſs as before, I took out the hammer, and ſtruck the ſolid maſs of quickſilver as hard as I could; it reſiſted the ſtroke, and yielded a dead ſound like lead; I ſtruck it again, and made a ſmall dent; a third time, and made a larger dent, until it gradually extended and flattened under the hammer, ſeparated

parated like an amalgama of the conſiſtence of cheeſe, and ſoon liquefied.

To me the congelation of quickſilver was a matter of mere curioſity; but the doctor's experiments tended not only to prove its abſolute congelation, but likewiſe to aſcertain exactly the freezing point, and to ſhew, contrary to the opinion of ſeveral philoſophers, that the purity or impurity of the mercury did not in any wiſe affect the ſucceſs of the experiment.

As the ſubject is in itſelf extremely curious, and rendered ſtill more intereſting by the very able treatiſe publiſhed by Dr. Blagden, Secretary of the Royal Society, in the Philoſophical Tranſactions, on the Hiſtory of the Congelation of Quickſilver, I ſhall here inſert a ſummary account of the experiments and obſervations communicated by Dr. Guthrie himſelf. I ſhall only add, that I myſelf was witneſs to moſt of the experiments mentioned in the following account.

" Mr. Joſeph Adam Braun, Profeſſor of the Imperial Academy of Sciences of St. Peterſburgh,

Peterſburgh, diſcovered, in December 1759, that mercury might be rendered ſolid by means of artificial cold; and ſince that time it has been congeled in ſevere winters by the cold of the atmoſphere in the northern countries of both the old and new continent.

This congelation of mercury by the natural cold, renders the knowledge of its freezing point a matter of great importance to the natural hiſtory of the earth as well as of man, as by determining the degree of cold neceſſary to effect this phænomenon, we ſhall be able to form an eſtimate of the real degree of cold obtaining in the countries near the poles, and conſequently of the power inherent in living animals to reſiſt it. Until lately our ideas on this ſubject were confuſed and erroneous. The experiments and obſervations of the moſt able naturaliſts in different parts of Europe and America were only of partial uſe to natural hiſtory and phyſics, by giving a place to mercury amongſt the malleable metals, and by demonſtrating that there is nothing eſſentially fluid in its nature, but that it is a metal

which melts with a leſs degree of heat than the others.

But ſtill the philoſopher was not informed what reliance he could place on the mercurial thermometer towards determining the cold of climates, as the motions of the quickſilver appeared by thoſe very experiments extremely irregular in the lower parts of the ſcale, falling many degrees in an inſtant, and after it had deſcended below a certain point ſinking ſuddenly into the bulb, and thereby indicating (if any concluſion could be drawn from its deſcent) that the animals of the northern countries could reſiſt the action of cold ſome hundred degrees below the freezing point of water. This ſuppoſition ſtaggered the faith of many philoſophers, and made them anxious that the matter ſhould be more fully inveſtigated. Accordingly the Royal Society of London deſired its members reſiding in cold countries to turn their attention towards determining the point of congelation of mercury, and to remark the deſcent of the mercury in the thermometer during the proceſs from the

the freezing point of water to that of mercury, in order to form a juſter notion of the real contraction of that metal. But it was not till lately that light was thrown on the ſubject, by a courſe of experiments made at the deſire of the Royal Society, by Mr. Hutchins, governor of Hudſon's Bay, who received excellent inſtructions from Mr. Cavendiſh, and Dr. Black, profeſſor of chemiſtry in the univerſity of Edinburgh. Theſe directions, and an apparatus made in London for the purpoſe, enabled the governor to perceive, that the ſudden and conſiderable deſcent which takes place in the lower parts of the thermometer, when expoſed to great cold, happens from the contraction of the metal in its frozen ſtate, and does not affect the regularity and juſtneſs of its contraction whilſt it remains fluid. This great point was principally aſcertained by means of a ſpirit thermometer, which was found not to freeze as ſoon as the mercury, and thereby indicated the degree of cold produced by his frigorific mixture, when the mercurial thermometer ceaſed to meaſure it

on account of its contraction on becoming ſolid.

In order to prove, that the deſcent of the mercury in the thermometer was derived from this new-diſcovered principle, namely, the contraction of this metal in freezing, and to try whether pure mercury required a greater degree of cold to freeze it than adulterated mercury, I made the following experiments with the following ſorts of mercury:

1. I procured from Mr. Winterberger, a famous chymiſt of St. Peterſburgh, the pureſt mercury known to chymiſts, viz. revivified from calomel by filings of iron. 2. From Dr. Pallas' native mercury, collected in a mine where no other metal is found but a little iron. 3. Common barometer mercury, furniſhed by Mr. Morgan, an Engliſh optician at Peterſburgh, juſt as he received it from England for filling his inſtruments. 4. Six drachms of common mercury, which I adulterated by diſſolving in it a quarter of a grain of tin foil.

I procured alſo ſome thermometers made

with great care and accuracy by Mr. Morgan, filled with the ſame purified mercury, N° 1. for the expreſs purpoſe of theſe experiments; alſo one with highly rectified ſpirits of wine, diſtilled by Mr. Winterberger.

Adjoined is a drawing of the apparatus I employed in theſe experiments, and which was ſuggeſted to me by my learned friend Dr. Black: it differs from that employed by Mr. Hutchins in being more ſimple, and conſequently the mercury eaſier to be examined during the proceſs of congelation. It conſiſts of a half pint water-glaſs C, wrapped round with coarſe flannel, and filled with fuming ſpirit of nitre and ſnow to produce artificial cold; a glaſs tube B, of about half an inch diameter, containing a little mercury to be frozen, and in this tube is inſerted a thermometer A, ſo that its bulb is buried in the mercury, but no part of the ſtem: the tube and thermometer thus arranged, are placed in the above-mentioned water-glaſs, containing the freezing mixture.

December the 22d, 1784. In a calm clear evening, Reaumür's thermometer at 17 degrees below O, after having expoſed the apparatus on a table in my court-yard (where I made my experiments) for two hours, to acquire the temperature of the atmoſphere, I poured a little of the purified mercury, N° 1, into the glaſs tube, and having inſerted a thermometer filled with the ſame purified mercury, ſo that its bulb was covered with the mercury in the tube, I placed them in the water-glaſs, filled with the freezing mixture, and in ſix minutes tranſported them into a ſecond, with ſimilar contents; the mercury in four minutes more became ſolid, and when I drew out the thermometer, with the frozen mercury ſurrounding its bulb in the form of a ſolid cylinder, it ſtood at 32½ degrees below O. Perceiving, however, a little fluid mercury ſtill remaining in the tube, I immediately replaced the thermometer with the mercury adhering to its bulb, and in a few minutes the mercury roſe about half a degree; when drawing it up a ſecond time, I found the

mercury

mercury was melted, and the bulb quite free from it. Now this experiment appeared deciſive, that the freezing point of pure mercury is at 32 ½ degrees below O on this thermometer; for as there remained a little mercury ſtill fluid in the tube, there ſeems to have been only produced ſufficient cold to freeze it, and as on its riſing half a degree the mercury became fluid, the point of congelation ſeems to be accurately determined.

Second experiment.—On the 9th January, 1785, between the hours of ſix and half paſt ſeven in the evening, I made the following experiments in preſence of Mr. Epinus, Mr. Coxe, and other gentlemen; I inſerted the mercurial thermometer uſed in the laſt experiment in a portion of the purified mercury, N° 1, and placed them in the cold mixture: the thermometer fell ſlowly to 32 ½, and was there ſtationary ſome time, whilſt we perceived the mercury in the tube freezing round the ſides of it, ſo as to produce a coating like tin foil in the Leyden phial; and on tranſporting it to a ſecond glaſs of cold mixture, the thermometer fell

in five minutes to 36 degrees, where it remained ſtationary during the time it continued in the mixture. What was very remarkable in this experiment, the mercury in the thermometer was ſtill fluid, although its bulb was frozen into that contained in the tube; for on reverſing the inſtrument, the mercury ran out of the bulb into the ſtem. Now, here is a proof that mercury may be cooled 3 ½ degrees below its freezing point without becoming ſolid.

Third experiment with native mercury.—It having been lately aſſerted, that a thermometer, filled with highly rectified ſpirits of wine, is better calculated to determine the freezing point of mercury, than one filled with the ſame metal, becauſe it reſiſts congelation longer, I plunged the ſpirit thermometer into the tube containing the native mercury. Having placed the apparatus in the glaſs with the refrigerant mixture for five minutes, and tranſported it into a ſecond glaſs, the ſpirit falling in the thermometer to 32, we examined the mercury, and found it frozen, although the ſpirits

of

of wine remained fluid, and the thermometer ſtood at the ſame degree, not only while the apparatus remained in the cold mixture, but even after I tranſported it into a warm room, and kept at the ſame point, until a large part of the bulb of the thermometer was uncovered by the melting of the frozen mercury, drop by drop, into a glaſs.

Fourth experiment on common barometer mercury.—The mercurial thermometer uſed in the firſt experiment was plunged into this mercury, and placed in the glaſs of cold mixture, where, having remained about five minutes, it was tranſported into a ſecond glaſs, and there in four minutes the thermometer ſunk down to 38, and remained ſtationary. There the ſame ſingular phænomenon preſented itſelf that appeared in the ſecond experiment, with ſome additions; viz. that the mercury was cooled down to $5\frac{1}{2}$ degrees below its freezing point on this thermometer without becoming ſolid.

Fifth experiment with the ſame mercury.—I froze a little of this mercury without inſerting a thermometer, in order to try its

malleability and ſpecific gravity; it flattened under the hammer, and of courſe is malleable, and ſunk in fluid mercury, which ſhews that it contracts conſiderably in freezing, differing in this circumſtance from common ice, which expands and ſwims in water.

Sixth experiment on mercury adulterated with tin.—The ſpirit of wine thermometer was plunged into this mercury, and ſtood at 32 when the mercury was frozen round its bulb.

Seventh experiment on purified mercury, was on the 10th of January, 1785 (a repetition of a former one) in the preſence of profeſſors Pallas and Ferber, and other gentlemen, who attended. I plunged the ſpirit thermometer into a portion of Mr. Winterberger's vivified mercury, and it fell to 32 degrees below O, whilſt the mercury was freezing, and remained there after it became ſolid ſo long as it ſtood in the frigorific mixture. I then drew the thermometer out of the tube with its bulb froze into the mercury, and hung it on a nail in the open air; the

the metal melted ſlowly in drops, and the ſpirit ſtill kept at the ſame point until the greateſt part was thawed; we finiſhed theſe experiments by trying with the ſpirit thermometer, what degree of cold was produced by a freſh frigorific mixture, which appeared to be juſt 35 degrees below O.

From the whole of theſe experiments, I am diſpoſed to conclude, that the freezing point of mercury is at 32 degrees below O on Reaumur's thermometer, or 40 of Fahrenheit's, and that common mercury does not freeze with a leſs degree of cold than what has been purified.

Eighth experiment.—February 1, 1785, a favourable cold of 15 degrees offering this evening, and being provided with ſome revivified mercury, twice diſtilled with fixed alkali by Mr. Winterberger, a preparation which has been ſaid to reſiſt a greater degree of cold than the others; but we found that it froze in 2 ½ minutes exactly at 32 degrees of Reaumur's mercurial thermometer, in the firſt glaſs of cold mixture, and differed in nothing

nothing from all the other ſorts excepting the following.

Ninth experiment.—Mercury purified with antimony froze in two different experiments at 30 degrees with a ſpirit thermometer, and in one with a mercurial thermometer at 32 degrees, ſo that there actually appears a diſpoſition in this preparation to freeze with a leſs degree of cold than the others; but it muſt be remarked, that it has a blackiſh dull colour and ſluggiſh motion.

Tenth Experiment.—Mr. Coxe being curious to try the malleability of the mercury diſtilled with alkali, which has a very bright and fluid appearance, I froze ſome of it in a tube, at the ſame time cooling the hammer in the refrigerant mixture, ſo as to acquire the ſame temperature as the frozen mercury, defending the iron from the action of the nitrous acid by means of a glaſs cylinder. This mercury bore ſeveral ſtrokes of the cold hammer, flattening like a leaden bullet.

Eleventh experiment.—I laſtly froze ſix drachms of common mercury, containing twelve

twelve times as much tin foil as in experiment the ſixth; but even this quantity of alloy, which rendered it almoſt an amalgama, did not diſpoſe it to freeze with leſs than 32 degrees of Reaumur.

February 16, O. S.—A cold of 24 degrees offering moſt unexpectedly this morning, ſo very late in the ſeaſon, and another experiment having been ſuggeſted to me by an ingenious friend, Mr. Romme, to put the point of congelation of impure mercury ſtill in a clearer light, I tried it about mid-day, when the cold was diminiſhed 4 degrees in the ſhade.

Mr. Romme remarked, that mercury takes up much more biſmuth than tin without loſing its fluidity or colour, and as biſmuth is a metal much oftener uſed to adulterate it, and very difficult to be ſeparated from it, he thought therefore a mixture of them was a very proper ſubject of experiment to decide the queſtion. I accordingly prepared an amalgama ſo thick, that it ſilvered glaſs like a mirror by merely running over it, and adhering

adhering ſo faſt as not to be removed without ſcraping. But ſtill the freezing point of this very impure mercury was the ſame as the others; viz. 32 degrees of Reaumur, by the mercurial thermometer. The ſpirit thermometer being employed to try the cold of the frigorific mixture, to my ſurprize fell no lower than the other thermometer inſerted in the mercury contained as uſual in a tube.

Thus ended my experiments this ſeaſon; and I think I may venture to draw the following inference from them:

That the point of congelation of mercury is at 32 degrees below O on Reaumur.

That there appears no difference in the point of congelation of purified and common mercury, except one preparation with antimony, which ſeems to congeal with a leſs degree of cold than all the others above-mentioned.

That in ſome circumſtances mercury may be cooled below its freezing point without loſing its fluidity, even as far as five and an half

half degrees, whilſt the portion in which the bulb of the thermometer is plunged becomes ſolid.

That there appears nothing in theſe experiments to affect the credit of the mercurial thermometer, as an accurate inſtrument for meaſuring the degrees of heat from the point of boiling water down to that of the congelation of mercury; but that no concluſions can be drawn from its motions below this point, as they depend on the contraction of the metal in a ſolid ſtate, which ought to be carefully diſtinguiſhed from what takes place whilſt it preſerves its fluidity; that therefore the ideas we have formed of the cold obtaining in the habited countries near the poles, and the aſtoniſhing power of animals to reſiſt it, muſt be erroneous *, as they have been taken from the extraordinary

* Dr. Blagden ingeniouſly infers from a compariſon of natural cold, during a ſeries of years, at Albany Fort, meaſured by a ſpirit thermometer, and of artificial cold produced by freezing mixtures, that the extreme of artificial cold produced by ſnow and nitrous acid correſponds pretty exactly with the extreme of natural cold in

extraordinary deſcent of the mercury in the thermometer, which, we now know, is derived from the contraction of the mercury when frozen, and not from ſuch an extraordinary degree of cold, as, if it had taken place, muſt have deſtroyed the whole ſyſtem of organized bodies.

That we cannot, according to our preſent knowledge of the ſubject, aſſert, that there exiſts a much greater degree of cold than the point of the congelation of mercury, no other inſtrument having been employed to aſcertain it than the mercurial thermometer, which is now proved of no authority below 32 degrees of Reaumur.

But it appears, that a thermometer filled with highly rectified ſpirits of wine preſerves its fluidity in a cold of 35 degrees of Reaumur, or 47 of Fahrenheit, and probably in a greater, ſo that it may be employed in northern climates with more advantage than one filled with mercury.

in the moſt rigorous climates, which can well be inhabited; and does not exceed 46″ of a ſtandard mercurial thermometer of Fahrenheit. Phil. Tranſac. vol. lxxiii. p. 387.

The

The ſurpriſing coincidence in the freezing of mercury congeled in Siberia by natural cold, with that effected by means of artificial cold, merits attention, as they both fix the freezing point of mercury at 32 of Reaumur; particularly profeſſor Laxman, in a late paper to the Imperial Academy, declares, that he found common mercury conſtantly become ſolid at 210 of De Liſle (32 of Reaumur) and that in the year 1782, it continued ſolid for two months together; and Dr. Pallas, in the third volume of his Travels, mentions the ſame phænomenon taking place about the ſame part of the ſcale."

Thus far Dr. Guthrie.

From a careful review of Mr. Hutchins's experiments, and a compariſon of the thermometers which he employed on that occaſion, Mr. Cavendiſh * concludes, that the true point at which quickſilver froze on Mr. Hutchins's thermometers, graduated according to the ſcale of Fahrenheit, was 40; and

* Philoſ. Tranſactions, vol. lxxiii. p. 2. page 321.

a ther-

a thermometer adjuſted in the manner recommended by the Committee of the Royal Society, freezes in 38 $\frac{2}{3}$, or in whole numbers 39 below freezing point, or 31 $\frac{2}{3}$ of Reaumur, which anſwers to the concluſion drawn by Dr. Guthrie from his experiments, eſtimating the point of mercurial congelation at 32 of Reaumur, or 40 below O of Fahrenheit.

As the degree of artificial cold requiſite to congele quickſilver had been greatly miſconceived and exaggerated, a ſimilar miſconception alſo prevailed with reſpect to the degree of natural cold neceſſary to the ſucceſs of the experiment.

Profeſſor Braun eſtimated, that the degree of natural cold ought not to be leſs than 190 of De Liſle, or 17 below O of Fahrenheit, and that opinion was generally adopted by the naturaliſts of Ruſſia, as when the mercury in the thermometer ſtood above that point, they conceived it needleſs to attempt the experiment.

Dr. Guthrie, however, in the courſe of his experiments, ſufficiently proves, that the congelation

congelation ſucceeded in a cold not exceeding O of Fahrenheit, and ſubſequent experiments made at Oxford by Mr. Walker ſhew, that a very ſmall degree of natural cold is ſufficient to obtain for the frigorific mixture the degree of cold neceſſary to congele quickſilver.

Mr. Walker congeled quickſilver by means of a mixture of, equal parts, of vitriolic acid and ſtrong fuming nitrous acid with ſnow, the temperature of the atmoſphere being only at 30, or 2 degrees below freezing point.

The ſame ingenious gentleman has alſo ſhewn, that it may be even frozen in ſummer, in the hotteſt climates, by a particular combination of the frigorific mixtures, without the uſe of ice *.

I ſhall cloſe this chapter with ſeveral curious experiments made in Siberia by Dr.

* Walker's Experiments on the Production of Artificial Cold, Phil. Tran. vol. lxxviii. p. 395.——Alſo Walker's Experiments on the Congelation of Quickſilver in England, Philoſ. Tranſactions for 1789, vol. lxxix. part 11. p. 199.

Pallas, for the purpoſe of aſcertaining the difference of the heat in animals during their torpid and natural ſtates.

Dr. Pallas having made an inciſion into the abdomen of a hedge-hog during its torpid ſtate, and placed Fahrenheit's thermometer in its belly, the mercury roſe only to 39½; and the animal gave no more ſigns of feeling, than if it had been actually dead, as well whilſt he was making the inciſion, as when he was ſewing up the wound, although the animal was immediately afterwards put into a warm room, gradually recovered from its lethargy, and walked about the chamber with as much inſenſibility as if no operation had been performed.

The doctor kept this hedge-hog in his houſe from December to the end of March; and although the heat of the apartment in which it lay was ſeldom under 60 degrees, yet it eat no food, and was never out of its torpid ſtate, except once or twice, when it was placed behind the ſtove, in a heat from 77 to 80. Rouſed by that expedient, it was awakened from its lethargy, took a few turns about

about the room, and eat a few morſels; but ſoon lay down again, and paſſed its torpid months as nature ordains.

It is probable, that the bodies of theſe animals, who ſleep during winter, are gradually prepared for the torpid ſtate by a deficiency of food, and a conſequent diminution of natural heat; for, a thermometer plunged in the bellies of marmots and hedge-hogs in their natural ſtates, roſe to 76, 79, 81, 86, 88, 99, and 99½, namely, from 36½ degrees to 50 higher than it roſe when plunged into the belly of the hedge-hog in its torpid ſtate.

The following fact alſo ſeems ſtill further to illuſtrate the conjecture, that a certain ſtate of body prediſpoſes to a torpid ſtate. A tame marmot, which had become extremely fat during ſummer in the profeſſor's houſe, continued awake during the whole winter, although it was expoſed to the ſame cold which threw the whole ſpecies into their torpid ſtate in that part of Siberia; nor was the doctor able to render it torpid,

even with the aſſiſtance of the ice-cellar, wherein he ſometimes confined it during ſeveral days.

By comparing this experiment with the ſleeping hedge-hog, which Dr. Pallas was not able to rouſe from its lethargy during the whole winter, except for very ſhort intervals, though expoſed to a heat of between 77 and 80 degrees; it ſeems to follow, that a certain ſtate of body is neceſſary to aſſiſt nature in laying aſleep ſome animals, to which they are gradually brought by a deficiency of nouriſhment about the beginning of winter, when they ſhut up their holes, and retire to reſt from inſtinct; and that the impulſe of the circulation and animal ſpirits, ariſing from heat or full feeding, ſuperſedes the neceſſity of the torpid ſtate, and prevents their falling aſleep.

It is alſo a curious circumſtance in the œconomy of nature, that Dr. Pallas found the heat of birds more conſiderable than that of quadrupedes; namely, from 103 to 111 degrees; a wiſe arrangement of providence,

vidence, in proportioning the heat of the winged tribe to the ſuperior cold obtaining in that part of the atmoſphere where they range.

CHAP. IV.

Journey from Peterſburgh to Riga—Hiſtory of Livonia—Narva—Dorpt—Riga—Anecdotes of General Brown.

MAY 8, 1785. On quitting St. Peterſburgh, we purſued our journey through part of Ingria, Eſthonia, and Livonia, provinces conquered from the Swedes by Peter the Great. As the ground was in many parts covered with ſnow, and as we travelled night and day, we could not ſufficiently obſerve the productions of the country; and as the incidents of the journey were in no wiſe remarkable, I ſhall chiefly confine my account to the hiſtory of Eſthonia and Livonia, and to a ſhort deſcription of Narva, Dorpt, and Riga, the only places through which we paſſed, in any degree worthy of notice.

As

As Eſthonia and Livonia, bordering upon Ruſſia, Sweden, and Poland, and reciprocally claimed and poſſeſſed by thoſe three powers, were, during a period of more than two centuries, a conſtant ſource and a perpetual ſcene of the moſt bloody wars, it may not be unneceſſary to ſtate briefly their hiſtory, and to trace the cauſes which rendered them objects of ſuch contention to thoſe three powers.

In 1158, ſome merchants of Bremen, bound to Wiſby, in the iſle of Gothland *, being drove by ſtreſs of weather, landed at the mouth of the Duna, and trafficked with the natives. Drawing conſiderable advantage from this trade, the merchants returned in great numbers, and gradually eſtabliſhed a ſettlement. A German monk of the Auguſtine order, who accompanied the new coloniſts, acquired the language of the country, converted ſeveral of the natives to Chriſtianity, and perſuaded them to be baptized.

* Nachrichter von Liefland, S. R. G. v. 9. p. 263.

According to the cuſtom of that barbarous era, an order of knighthood, firſt called the Knights of Chriſt, and afterwards with more propriety the Knights of the Sword, was inſtituted for the propagation of Chriſtianity by fire and ſword. Thoſe military miſſionaries, equally fanatic and ſanguinary, gradually overran the country, and reducing the antient inhabitants, rendered them at the ſame time Chriſtians and ſlaves.

In 1231, theſe knights, being incorporated in the Teutonic order, ſtiled themſelves Knights and Lords of the Croſs, and purchaſed Eſthonia, in 1521, from the king of Denmark. Walter Plettenberg their chief, or general of the order, having obtained from the grand maſter of the Teutonic order the chief juriſdiction of Livonia, was conſidered as independent, and admitted ſoon afterwards by Charles the Fifth among the princes of the empire.

The knights continued in poſſeſſion of Eſthonia and Livonia, until the weakneſs and impolitic conduct of their maſters, and civil diſſenſions, incited the ambition of the neighbouring

neighbouring powers, and involved the country in a ſeries of bloody wars.

In 1556, the archbiſhop of Riga being impriſoned by Walter Furſtenberg, the general of the order, implored the aſſiſtance of his uncle Sigiſmond Auguſtus king of Poland. Sigiſmond immediately armed in favour of his nephew, invaded Livonia, and compelled Walter Furſtenberg not only to reſtore the archbiſhop to liberty, but to conclude a treaty, by which he acknowledged himſelf and the province of Livonia dependent on the crown of Poland.

. But Ivan Vaſſilievitch, whoſe anceſtors had formerly poſſeſſed Dorpt, and other towns in Livonia and Eſthonia, laid claim to theſe provinces, and entering Livonia with a formidable army, reſolved to annex them to the Ruſſian empire.

. In this imminent danger, the city of Revel, and the inhabitants of Eſthonia, threw themſelves under the protection of the king of Sweden, who, in taking poſſeſſion of that province, claimed Livonia as an annexed dependency. At the ſame time the Ruſſians,

entering

entering Livonia, met with little reſiſtance, took Furſtenberg, the grand maſter, priſoner, and over-ran the greateſt part of the country, in 1559.

Gothard Ketler, who was appointed grand maſter in the place of Furſtenberg, finding it impoſſible to reſiſt the Ruſſian arms, haſtily concluded a treaty with Sigiſmond Auguſtus, ceded Livonia to the crown of Poland, on condition of reſerving to himſelf and heirs male the duchies of Courland and Semigallia as fiefs of Poland. At the concluſion of this treaty, Livonia, the object of contention, thus ceded to Poland, was partly poſſeſſed by the Poles, partly by the Swedes, and partly over-run by the Ruſſian arms.

In this ſituation of affairs, Ivan Vaſſilievitch conferred on Magnus prince of Denmark, who, in the capacity of biſhop of Pilten in Courland, had ſome pretenſions to Livonia, the nominal ſovereignty of that province. Having already related * the ac-

* Book III. Ch. vi.

count

count of that tranſaction, together with the erection and extinction of the ſhort-lived kingdom of Livonia, I ſhall only add, that Ivan Vaſſilievitch, being worſted by Stephen Bathori, king of Poland, in ſeveral engagements, was glad to purchaſe a peace, by ceding, in 1582, to the crown of Poland, all that part of Livonia which he had occupied: but the king of Sweden continued in poſſeſſion of Eſthonia; and, by the fourth article of the peace of Oliva, obtained poſſeſſion of all Livonia. Theſe important provinces of Livonia and Eſthonia, containing all the north diſtrict; between the gulf of Finland, the Narova, the Peipus lake, and the Duna, and ſtretching to the boundaries of the preſent government of Polotſk, were wreſted from the Swedes by Peter the Great, and confirmed to the Ruſſians by the peace of Ryſtadt, in 1721.

The reformation was firſt introduced into Livonia and Eſthonia in 1522, and was ſoon embraced by all ranks of people. The Lutheran religion is the moſt prevalent; but all other ſects are tolerated.

Narva

Narva and its ſuburbs, according to a geographical diviſion, are ſituated partly in Ingria, and partly in Eſthonia, as the river Narova divides thoſe two provinces; but in the diviſion of governments eſtabliſhed by the preſent empreſs, it is compriſed in Ingria, or the government of St. Peterſburgh.

Narva is near 100 miles from Peterſburgh, and ſtands on the Narova, 24 miles from the point where that river iſſues from the lake Peipus, and eight miles from its mouth, where it falls into the gulf of Finland. The houſes are built of brick ſtuccoed white, and it has more the appearance of a German than of a Ruſſian town.

In the ſuburbs, called Ivangorod, or John's Town, the coloſſal remains of an antient fortreſs, built by Ivan Vaſſilievitch the Great, impend in a pictureſque manner over the ſteep banks of the Narova.

The principal exports from Narva are hemp, flax, timber, and corn; the imports, ſalt, tobacco, wine, ſalted herrings, ſpices, tea, ſugar, and other grocery wares.

I did

I did not omit viſiting the two falls of the river Narova, which have been too pompouſly deſcribed by ſeveral travellers, and which muſt appear trifling and unintereſting to any one who has ſeen the fall of the Rhine at Schaffhauſen; of the Dahl, near Gefle, in Sweden; and the ſtupendous cataracts of Trolhætta.

The breadth of the river is about 200 feet, and the perpendicular height of the falls ſcarcely exceeds twenty feet. The ſteep and chalky banks of the river, its rapid and turbid ſtream, and a rocky iſland which ſeparates the two falls, form a rugged and picturesque ſcenery, which is heightened by the foam and roaring of the cataract.

Near Narva is the ſpot celebrated for the victory which Charles the Twelfth, in the nineteenth year of his age, gained over the Ruſſian army in 1700. Authors prone to exaggeration, and willing to render more marvellous the exploits of the Swediſh hero, have diminiſhed the Swediſh army to 3,000, and increaſed the Ruſſians to 100,000. The fact ſeems to be, that Charles headed, on

that

wars between the Swedes and Ruſſians in the beginning of this century; and particularly in the ruins of its cathedral, which form a pictureſque object on an adjacent hill. In addition to theſe devaſtations, the town ſuffered a few years ago from a violent conflagration; but it is now rebuilding, and will riſe more beautiful from its ruins, as the empreſs has contributed with her uſual munificence. A wooden bridge over the Empack was likewiſe burnt down, but has been ſupplied by a magnificent ſtone bridge, on which I remarked, and noted down, the following arrogant inſcription:

* Siſte impetus hic flumen,
Catharina II. jubet;
Cujus munificentia hæc moles
In publicum commodum
Extructa, Livoniaque primo
Lapideo ponte adornata.
1783.

* Here, O river, ſtop your impetuous courſe, Catharine the Second commands; by whoſe munificence this mound was raiſed, and Livonia adorned with this firſt ſtone bridge.

In purſuing our route from Narva to Dorpt, we coaſted the lake Peipus, a large but unintereſting piece of water, the banks flat, and the environs moſtly ſandy.

Dorpt ſtands in the midſt of the moſt fertile part of Livonia, which has been called, from the abundance of grain it produces, the Granary of the North; and this fertile diſtrict continued till we came within a few miles of Riga, which is inveſted, as Mr. Wraxall juſtly obſerves, "on every ſide with deep barren ſands. Its ſituation in ſo barren a ſpot was choſen by commerce, the genius of which ſtill protects and enriches it *."

Riga, the capital of Livonia, contains within the fortifications 9,000 inhabitants, and in the ſuburbs 15,000, excluſive of a garriſon of 1,000 ſoldiers. It derives its conſequence from its ſituation on the Duna, a river which, being navigable from the frontiers of the government of Polotſk, brings the productions of the north-eaſtern

* Wraxall's Northern Tour, p. 281.

parts of Poland, and the weſtern provinces of Ruſſia, and is ſufficiently deep to receive, cloſe to its walls, ſhips of burthen, which ſail to and from the Baltic.

Next to St. Peterſburgh it is the moſt commercial town in the whole Ruſſian empire. The trade is chiefly carried on by foreign merchants, who are reſident in the town. The merchants of an Engliſh factory eſtabliſhed there enjoy the greateſt ſhare of the commerce, and live in a very hoſpitable and ſplendid manner. The principal exports are corn, hemp, flax, iron, timber, maſts, leather, tallow, &c.; its principal imports are ſalt, cloth, ſilks, wine, grocery wares, and ſalted herrings.

The maſt trade, ſo beneficial to this town, is carried on in the following manner: The burghers of Riga ſend perſons, who are called maſt-brokers, into the Ruſſian provinces, in order to mark the trees which are fit for the purpoſe. The proprietors of the lands ſell them ſtanding. They grow moſtly on the diſtricts which border on the Dnieper, and are ſent up that river to a landing-

place,

place, and tranſported about thirty verſts to the Duna. They are then formed into floats of from 50 to 200 pieces, and deſcend the ſtream to Riga. The tree which produces the largeſt maſts is the Scotch fir. Thoſe pieces which are from 18 to 25 inches in diameter are called maſts; under thoſe dimenſions, ſpars, or, in England, Norway maſts; becauſe Norway exports no trees more than 18 inches in diameter.

The Engliſh merchants, who contract with government, buy theſe maſts from the burghers of Riga; and great ſkill is required in diſtinguiſhing thoſe that are ſound throughout from thoſe which are in the leaſt internally decayed. They are uſually from 70 to 80 feet in length.

The hemp is brought from the Ukraine and Poland, and employs two years in its paſſage to Riga. The barks in which it is conveyed, are from 250 to 300 tons burthen; are covered with matting, ſloping like a penthouſe roof, and have a falſe bottom. They aſcend the Dnieper and the Duna; but can only paſs the laſt-mentioned

river in the ſpring, or about three weeks after the ſnow begins to melt, on account of the numerous ſhoals; ſo that if they miſs that time, they are delayed till autumn.

The hemp exported from Riga is generally more eſteemed, and 30 per cent. dearer than that which is exported from Peterſburgh *; the former comes from the Ukraine, the provinces of Mohilef and Polotſk, and the neighbouring parts of Poland; the other from the governments of Tver and Novogorod.

The Riga hemp is chiefly uſed for ſhrouds and ſtays of men of war; and procured by contract for the Engliſh admiralty and Eaſt India company.

In caſe of neceſſity, the *Urtica Cannabina*, or the hemp-nettle, might be ſubſtituted in the place of hemp. It is a native of ſouth-eaſtern Siberia, on the other ſide of the Oby, and is chiefly found in the vallies, between rocky mountains, and on the banks of rivers. It comes out early in the ſpring, and af-

* Lately the Ukraine hemp has found its way to Peterſburgh.

fords

fords good ſhoots, which are eaten by the natives as vegetables. It flowers in June or July; and in good ſoils ſhoots from ten to fifteen feet high. In Siberia the ſeeds ripen in September, about the time of the firſt froſt. It is perennial, and multiplies by running. The cords made from this ſpecies are ſtronger even than thoſe twiſted from hemp. The Mongol Tartars uſe them for the cords to their bows, and for nets to catch animals in the woods. In ſome parts of Germany the natives employ them for ropes. This plant is deſcribed in Amman's *Stirpium Rariorum in Imperio Rutheno Icones et Deſcriptiones*, p. 173. N° 249. plate 25. *Urtica foliis profunde laciniatis*; alſo in Gmelin's Flora Siberica. It will be deſcribed in the third volume of Pallas' Flora Ruſſica.

The common nettle, the *urtica urens* of Linnæus, ſupplies the natives of Kamtſchatka *, and of the Kuril Iſles, with cords for their fiſhing-nets.

The inhabitants of Riga carry on alſo a

* See Cook's laſt voyage, vol. iii. p. 339.—Pallas Nord. Beytr. vol. iv. p. 117.

conſiderable commerce in ſalt. They import it from Spain, and ſend it up the Duna to ſupply the diſtricts bordering on that river; and by land into Courland, and the neighbouring provinces of Poland.

We paid our reſpects to General Brown, the governor of Riga, and had the honour of dining with that gallant veteran, who, with a pleaſing garrulity natural to old age, related a variety of intereſting adventures that had befallen him in the courſe of a long and active life. He is a native of Ireland, and was born in the beginning of this century. Being a Roman catholic, he was compelled to ſeek his fortune in foreign courts, which he would willingly have dedicated to his own. He firſt entered the Auſtrian, and finally into the Ruſſian ſervice. He ſerved under Count Munich againſt the Turks, in the campaigns of 1737, and 1738, and diſtinguiſhed himſelf at the ſiege of Otchakof. Being ſent with a corps of troops into Hungary, he was taken priſoner by the Turks, ſold as a ſlave, and transferred to four different maſters. At one time he was bound

back

back to back with another priſoner for eight-and-forty hours, and expoſed almoſt naked at the various places where ſlaves are brought for ſale. He had then borne the rank of colonel in the Ruſſian ſervice, but gave out, that he was only a captain, in order to leſſen the price of his ranſom. Having been accidentally met by a gentleman, to whom he was perſonally known, he ſent information of his ſituation to the French embaſſador, who found means to purchaſe him for 300 ducats. But his Turkiſh maſter diſcovering that he was of higher rank than he had pretended, reclaimed his priſoner, and threatened to uſe force in order to recover him. The French embaſſador, however, applied to the Grand Vizir, who decided in his favour: Count Brown recovered his liberty, and returned to Ruſſia, in which ſervice he was gradually promoted, and has been lately appointed governor of Riga, a place of the greateſt truſt.

The bridge over the Duna, at Riga, is a floating wooden bridge, 40 feet in breadth, and 2,600 in length, and is formed in the

following manner: A row of piles is driven in, extending from one ſhore to the other; each pile is from 25 to 40 feet long, according to the depth of the river, and appears about four feet above the level of the water. To theſe piles the ſeveral parts of the bridge are looſely faſtened, by means of iron chains fixed to the tranſverſe beams. The bridge riſes and falls with the river; and when heavy laden carriages paſs over it, plays under the wheels as if actuated by a ſpring. This bridge is the faſhionable walk, and is an agreeable buſy ſcene, when crowded with people, and lined on each ſide with ſhips taking in or unloading their cargoes. In the beginning of winter, when the froſt ſets in, the bridge is taken to pieces, and removed; the piles remaining in the water, are forced up by the ice, and conveyed to land: the whole is again laid down, on the melting of the ice, in the ſpring.

The importance of the trade of Riga will appear from the following tables:

LIST

LIST of the Number of Veſſels arrived at RIGA, 1782 and 1783.

	1782.	1783.
Daniſh - - -	125	145
French - -	—	8
From St. Peterſburgh -	43	38
Engliſh - - -	94	200
Dutch - - -	6	122
Swediſh - - -	298	422
Pruſſian - - -	153	123
From Oſtend - -	123	66
Portugueſe - -	7	7
American - - -	—	1
From Bremen - -	16	34
Dantzic - -	5	10
Lubec - -	29	26
Roſtoc - -	23	3
Hamburgh - -	5	5
Pernau - - -	4	6
From Riga - -	30	38
Total -	961	1,254

LIST

LIST of the Number of Veſſels which arrived and ſailed from RIGA, in 1784; ſpecifying thoſe which wintered there.

	Wintered.	Arrived.	Departed.
Daniſh - - -	—	160	160
French - - -	—	10	10
From St. Peterſburgh	14	32	36
Engliſh - - -	3	175	174
Portugueſe - -	—	4	4
Pruſſian - -	2	77	77
Swediſh - - -	4	311	311
Dutch - - -	—	170	170
From Oſtend - -	—	33	33
Genoa - -	—	1	1
Hamburgh - -	—	12	12
Lubec - -	4	27	27
Bremen - -	1	25	24
Dantzic - -	—	3	3
Roſtoc - -	—	11	11
Pernau & Revel	—	4	4
Riga - -	15	30	20
Total -	43	1,085	1,077

VALUE

VALUE of the Cargoes of the Veſſels which ſailed from RIGA, in 1784.

		Roubles.	Copecs.
For Denmark	- -	735,335	78 —
France	- -	270,886	68 —
the Dominions of the Emperor	- -	51,209	45 —
England	- -	1,288,284	58 —
Spain	- -	388,843	1 —
Portugal	- -	302,213	93 —
Pruſſia	- -	64,775	75 —
Sweden	- -	1,182,907	79 —
Holland	- -	1,470,320	93 —
Italy	- - -	135,097	8 —
Hamburgh & Bremen		209,840	7 —
the Baltic	- -	292,707	39 —
Total of Exports	- *	6,392,422	44 —
Value of the Imports	†	1,422,717	87 12
Exceſs of Exports	- ‡	4,969,704	56 12

* In Engliſh money, if we eſtimate a pound ſterling at ſix roubles, £. 1,065,403, omitting the fractions.

† £. 237,119. ‡ £. 828,284.

COIN

COIN IMPORTED.

	Value in Roubles.
Ducats 448,793 - -	1,207,741 10
New rix-dollars 1,780,744½	2,368,389 85½
Old rix-dollars 138,976½	1,182,058 84½
Sum total of Coin imported - -	* 4,758,189 79½

* £.793631.

CHAP.

CHAP. V.

Mittau — Dutchy of Courland — Hiſtory — Succeſſion — Anecdotes of Erneſt John Biron — Conſtitution — Feodal Dependance on Poland — Rights of the King of Poland — Prerogatives of the Duke — Diet — Nobles — Religion — Language.

ON quitting Riga we croſſed the Duna, paſſed through a flat ſandy country, thinly inhabited, to the Ruſſian frontiers, about ſixteen Engliſh miles diſtant from Riga, and entered the dutchy of Courland. Our baggage was moſt ſtrictly examined by a Ruſſian cuſtom-houſe officer, who even opened our portfolios, and examined the ſmalleſt pieces of paper. This ſtrict ſearch is made for the purpoſe of preventing foreigners from carrying out of Ruſſia the current coin; an uſeleſs precaution, it ſhould ſeem, conſidering the debaſed ſtate of the coinage.

Mittau,

Mittau, ſixteen miles from the frontiers of Livonia, ſtands in the midſt of a very fertile and agreeable country; is a long town, containing a mixture of brick houſes, ſtuccoed white, and wooden buildings. It contains little remarkable but the palace and the academy.

The palace, built by the late duke, is a great pile of buildings, containing a large and a handſome ſuite of apartments, but almoſt totally without furniture. It is ſo magnificent, and upon ſo large a ſcale, for ſo little a ſovereignty, as almoſt to juſtify the witticiſm of a traveller, who affirmed that the palace was larger than the dukedom, eſtimating the country not from its ſize, but from its trivial conſequence in the ſcale of the north.

The academy, inſtituted by the preſent duke at a conſiderable expence, contained, in May 1785, almoſt as many profeſſors as ſtudents, there being eight profeſſors, and only twenty ſtudents.

The dutchy of Courland and Semigallia is bounded on the north by the Baltic, on

the eaſt by Livonia, and by Poland on the ſouth and weſt. It ſtretches in length 250 Engliſh miles, and its average breadth may be eſtimated at about 40 miles.

In the laſt chapter I have already obſerved, that Gothard Ketler, grand-maſter of the Livonian knights, in conſideration of ceding Livonia to Poland, was to be inveſted with the dutchy of Courland and Semigallia. At Wilna, where this treaty was concluded, in 1561, Gothard Ketler, and the principal knights, quitting the habit and enſigns of the order, he received the inveſtiture of his new dukedom as an hereditary fief to be held of the crown of Poland, and did homage for the ſame.

Gothard dying in 1587, was ſucceeded by his ſon Frederic; and, in 1589, it was enacted by the diet of Poland, that if this fief ſhould be vacated by the extinction of the heirs male of the line of Ketler, Courland and Semigallia ſhould be united to Poland. But the republic of Poland was not ſufficiently powerful to enforce this edict when that event took place.

Frederic

Frederic William, duke of Courland, dying, in 1711, without iſſue, the right of ſucceſſion devolved on his great uncle Ferdinand, the only ſurviving branch of the Ketler line; but Peter the Great, who had overran Courland with his army, took poſſeſſion of Mittau and great part of Courland, under the pretence of ſecuring the dowry for his niece Anne, widow of Frederic William. Ferdinand, who was abſent from Courland, and at variance with his nobility, was unable to enforce his right; and Courland was, during the ſpace of ſeveral years, governed by the Ruſſian court, under the name of the Dutcheſs Anne. The country was in a ſtate of civil confuſion, and ſeveral ineffectual attempts were made to raiſe, firſt, a prince of the houſe of Saxony, and afterwards, Frederic William, Margrave of Schvedt, to the ducal throne.

At length, in 1726, the infirmities and abſence of Ferdinand giving a pretext, the oppoſite party of nobles determined to appoint a ſucceſſor; and Auguſtus the Second, king of Poland, ſecretly influenced the diet

of

of Courland to nominate his own natural ſon Maurice, afterwards ſo well known under the title of Marſhal Saxe. This appointment was conteſted by the republic of Poland, and by Catharine empreſs of Ruſſia.

The Poliſh diet, which aſſembled at Grodno, denied the right of the nobles of Courland to appoint a duke, declared that dutchy a vacant fief belonging to the republic of Poland, annulled the election of the Count of Saxe, and propoſed, on the death of Ferdinand, to incorporate the dutchies of Courland and Semigallia to the crown of Poland, according to the edict of the Poliſh diet paſſed in 1589.

Catharine, who conſidered Courland almoſt as a province of the Ruſſian empire, and anxious to appoint a duke of her own nomination, equally oppoſed the election of Maurice, and the incorporation of Courland to the crown of Poland; and prince Mentchikof, who, on the death of Catharine, aſpired to the ducal throne, diſpatched a corps of Ruſſian troops to Mittau, and drove Maurice from Courland. The fall of Ment-

chikof prevented his nomination; but the Ruſſians, firſt under Peter the Second, and afterwards under Anne, maintained their troops and influence in Courland, and promiſed to ſupport the ſtates in their right to elect a ſovereign on the deceaſe of Ferdinand the reigning duke.

The death of Auguſtus the Second, in 1733, annihilated the hopes of Maurice; and, on the death of Ferdinand, in 1737, the empreſs Anne forced the ſtates of Courland to elect her favourite, Erneſt John Biron, and ſupported his election in oppoſition to the claims and remonſtrances of Poland.

At length, deputies from the empreſs and the new duke of Courland on one ſide, and from the king and republic of Poland on the other, regulated the convention between the kingdom of Poland and the duke of Courland. This convention, called *Pacta Subjectionis*, or Acts of Vaſſalage, ſettled the feodal rights of the king and republic of Poland, regulated the conſtitution of Courland according to the former conventions

or acts of vaſſalage agreed to by the preceding dukes, and eſtabliſhed the ſucceſſion to the duchy of Courland in the male line of Erneſt John Biron.

In 1739, the chancellor of Courland did homage in the name of the duke to Auguſtus the Third, king of Poland. But, in 1740, Biron being arreſted and impriſoned by order of the princeſs Anne, regent of Ruſſia, under her infant ſon Ivan, the ſtates of Courland declared the ducal throne vacant, and elected, at the recommendation of the regent Anne, Louis Erneſt, prince of Brunſwick, and brother of her huſband Anthony Ulric; the ſame perſon who was afterwards governor to the ſtadtholder of the United Provinces, and generaliſſimo of the Dutch forces, until he was driven from Holland by the French, or, as they ſtiled themſelves, the patriot party.

The revolution of 1741, which dethroned Ivan, and placed Elizabeth on the throne of Ruſſia, prevented the ratification of this election; and from that period, till 1759, the adminiſtration was nominally veſted in

the council of ſtate; but the whole power centered in the court of Ruſſia.

In 1758, the nobles of Courland, diſguſted with their rulers, declared the ducal throne vacant, and elected Charles Chriſtian, third ſon of Auguſtus the Third. Charles received, in 1759, the inveſtiture of the two dutchies from the king of Poland, made his entry into Mittau the ſame year, and repairing to Peterſburgh, obtained from the empreſs Elizabeth the reſtitution of the ducal eſtates and revenues which had been ſequeſtered by Ruſſia, and her renunciation of all right and title to thoſe two dutchies.

But the death of Elizabeth, in 1761, rendered this reſtitution ineffectual. Peter the Third recalled Biron from exile; and Catharine the Second had ſcarcely aſcended the throne, by the depoſition of Peter, before ſhe reſtored Biron to his former dignity.

I ſhall cloſe this haſty ſketch of the ſucceſſion to the dutchy of Courland with ſome biographical anecdotes of that celebrated perſonage.

Erneſt John Biron * was deſcended from a family of mean extraction. His grandfather, whoſe name was Buren, or Bieren, was head groom to James the Third, duke of Courland, and obtained from his maſter the preſent of a ſmall eſtate in land. His ſon accompanied prince Alexander, youngeſt ſon of the duke of Courland, in a campaign into Hungary againſt the Turks, in quality of groom of his horſe, and with the rank of lieutenant. Prince Alexander being killed before Buda, in 1686, Biron returned into Courland, and was appointed maſter-huntſman to the duke.

Erneſt John, his ſecond ſon, was born in 1687, received the early part of his educa-

* For this account of Biron I have conſulted Manſtein's Memoirs, p. 42, 47, 62, 190, 263, 265, 268, 280; Letters from a Lady in Ruſſia, Let. xxviii. xxix; Schmidt's Materialien fuer den Ruſſ. Geſh. p. 38, 44, 281, 321; Motifs de la Diſgrace d'Erneſt Jean de Biron, Duc de Courland, written by himſelf, in Burching's Hiſt. Magazin. vol. ix. p. 383, 398; Antworf auf die Vergehende Schrift. von einem naechſten Verwandten des Grafen von Munich, ibid. p. 401, 414; Gouvernement de l'Empire de Ruſſie, by Marſhal Munich, paſſim.

tion in Courland, and was ſent to the univerſity of Konigſbergh in Pruſſia, where he continued until ſome youthful imprudences compelled him to retire.

In 1714, he made his appearance at St. Peterſburgh, and ſolicited the place of page to the princeſs Charlotte, wife of the tzarovitch Alexey; but being contemptuouſly rejected as a perſon of mean extraction, retired to Mittau, and chanced to ingratiate himſelf with count Beſtuchef, maſter of the houſhold to Anne, widow of Frederic William duke of Courland, who reſided at Mittau. Having through his means obtained the office of gentleman of the chamber, and being of a handſome figure and polite addreſs, he ſoon gained the good-will of the dutcheſs, and became her chief favourite. The firſt uſe which he made of his favour, was to obtain the diſgrace and removal of his benefactor Beſtuchef. He ſoon gained ſuch an entire aſcendency over the affections of his miſtreſs, that his will became her's; and the upſtart favourite offended by his arrogance the whole body of the nobility of Courland.

Having

Having eſpouſed Mademoiſelle de Trenden, a lady of noble family, and maid of honour to the dutcheſs, he endeavoured, by means of that alliance, and the favour of his miſtreſs, to be admitted into the body of nobles; but his ſolicitations were rejected with great contempt.

His aſcendency over the dutcheſs, his ſpirit of intrigue, and his extreme arrogance, were ſo notorious, that when Anne was declared ſovereign of Ruſſia, one of the articles propoſed to her by the council of ſtate at Moſcow, expreſsly ſtipulated, that ſhe ſhould not bring Biron into Ruſſia. She conſented, but inſtantly broke her word; for ſhe had ſcarcely arrived at Moſcow, before he made his appearance at her court.

By his ſecret advice, the empreſs formed a ſtrong party among the Ruſſian nobility, gained the guards, and brought about the revolution, which reſtored to the crown deſpotic authority.

But when the whole plan was ripe for execution, Anne heſitated, and was alarmed, till Biron took her by the hand, and led her

to the door of the apartment in which the council of ſtate, ſenate, and principal nobility were aſſembled; and ſhe was declared abſolute ſovereign.

Within the ſpace of a few months, Biron was appointed gentleman of the bed-chamber, knight of the order of St. Andrew, and lord high chamberlain, and, as Manſtein ſays, was omnipotent in the government; for, during the whole reign of Anne, and ſome weeks after her death, he ruled with deſpotic ſway the vaſt empire of Ruſſia.

On the death of Ferdinand Ketler, in 1737, the empreſs diſpatched general Biſmarck, governor of Riga, to Mittau, at the head of a conſiderable army. The nobles having aſſembled in the cathedral, Biſmarck ſurrounded the church with troops, and compelled them to elect for their ſovereign the ſame Biron whom they had refuſed to admit into their corps. But his new dignity did not prevent him from keeping his poſt of high chamberlain, and his wife that of firſt lady of the bed-chamber.

Biron governed Courland with the ſame deſpotic

deſpotic ſpirit with which he governed Ruſſia; and the nobles, who had been accuſtomed to great freedom of debate in their diets, were ſuddenly reſtrained. Thoſe who ventured to oppoſe his will, or to ſpeak with their uſual freedom, were privately ſeized by perſons in maſks, forced into kibitkas, and conveyed to Siberia *.

Of a violent and ſanguinary temper, Biron ruled Ruſſia with the knout in his hand, and compelled his imperial miſtreſs, who was naturally of a mild and merciful diſpoſition, to order acts of the moſt atrocious cruelty, though ſhe oftentimes interceded, but in vain, with tears in her eyes, for the unhappy victims of his ſuſpicion and vengeance.

The cruelties exerciſed upon the moſt illuſtrious perſons of the country almoſt exceed belief; and Manſtein conjectures, that "during the ten years in which Biron's power continued, above 20,000 perſons were ſent to Siberia, of whom ſcarcely 5,000 were ever more heard of."

* Manſtein, p. 196.

The

The violence of his temper would break forth in a manner moſt diſreſpectful to the empreſs. Once in particular, while the duke of Bevern had an audience, Biron burſt into the apartment without ceremony, threatening, with the moſt horrid imprecations, that he would no longer be vexed and tormented by her ſervants, but would retire into Courland. Having uttered theſe words, he quitted the room, and ſhut the door with great violence. The empreſs, in the higheſt conſternation, lifted up her hands to heaven, then claſped them together, and being almoſt ready to faint, ſhe opened the window for freſh air. While ſhe continued in this agitation, the dutcheſs of Courland, accompanied with her children, entered the room, kneeled down, and entreated the empreſs to forget and forgive the paſſionate behaviour of her huſband. Anne in this, as in every other inſtance, relented, and bore with his inſolence *.

His influence over his imperial miſtreſs

* Buſching's Wochentliche Nachrichten, 1774, p. 316.

was

was ſuch, that during the ſitting of the cabinet council, ſhe uſed frequently to repair to an adjoining room, in which her favourite remained, to receive his advice, or rather his orders. She had no table of her own, but uſed to dine with his family.

He knew only two languages, the German, and his native jargon ſpoken in Courland; ſo that he governed the extenſive empire of Ruſſia without even underſtanding its language. He even piqued himſelf on his ignorance of that tongue, having once ſaid in the preſence of the empreſs Anne, that he would not learn the Ruſſian, becauſe he could not bear to read before her majeſty all the reports and memorials which were daily tranſmitted to him.

Biron was undoubtedly a man of very great capacity; during his whole adminiſtration, the external ſplendour of the Ruſſian empire, and its internal tranquillity, announced the wiſdom of his meaſures; and he ſhewed his judgment in employing ſuch a ſtateſman as Oſterman, and ſuch a general as Munich.

He

He was a ſincere friend and an implacable enemy; and it was juſtly ſaid of him, that he ſeldom forgot a benefit, and always remembered an injury.

He amaſſed an enormous fortune in money and jewels; and on public occaſions his magnificence * far exceeded the magnificence of the empreſs.

He had ſo long directed the affairs of a great empire, that he could not brook retiring into Courland. He accordingly pre-

* In his viſit of ceremony to the Marquis de la Chetardie, the French embaſſador, he was preceded by the following proceſſion:

1. An officer of his court on horſeback.
2. Two ſervants on horſeback.
3. Three carriages drawn by ſix horſes, containing ſix cavaliers.
4. Twenty-four ſervants on horſeback.
5. Six running footmen.
6. Two blacks.
7. Thirty lacquies on foot.
8. Twelve pages.
9. Nine heyducs.
10. His maſter of the horſe.

Laſtly, The duke himſelf in a ſplendid carriage drawn by ſix horſes; behind, two ſervants in Turkiſh dreſſes.

vailed

vailed upon the empreſs, on her death-bed, to appoint her great nephew, prince Ivan, her ſucceſſor, and himſelf regent, until the prince had attained the age of ſeventeen; and he managed this whole tranſaction with ſo much art, that he ſeemed only to accept the regency at the earneſt requeſt and recommendation of Marſhal Munich, the Chancellor Oſterman, and the principal Ruſſian nobility, as it were for the good of the empire, and not to ſatisfy his own ambition.

Having thus ſecured the regency, to the excluſion of Anne, the mother of the young emperor, the firſt act of his power in that capacity, was to obtain for himſelf a clear revenue of 500,000 * roubles per annum, and the title of Imperial Highneſs.

But the power which he had thus acquired by intrigue, he attempted to ſecure by repeated acts of arrogance, perſecution, and cruelty. Piquets were placed in the ſtreets to prevent commotions. The numerous ſpies which he entertained brought

* £. 100,000, according to the value of a rouble of that period.

him

him vague accounts of contemptuous expreſſions, and ill-formed plots. Such numbers were arreſted, that ſcarcely a day paſſed in which perſons ſuſpected were not impriſoned and tortured in order to force confeſſion. But inſtead of diſarming the envy and jealouſy of the natives, who were diſaffected at being governed by a foreigner, he increaſed his own unpopularity by the haughtineſs of his demeanour, and treated even the parents of his ſovereign with the moſt extreme brutality.

It was natural that prince Anthony Ulric and the princeſs Anne, the father and mother of the infant emperor, ſhould be diſaffected at being ſet aſide, and a foreigner preferred to the regency; and Anthony Ulric, who was a prince of great ſpirit, even expreſſed his diſapprobation in the ſtrongeſt terms to the regent himſelf.

The duke of Courland, ſuſpecting that the prince was forming cabals againſt his government, called on him early one morning unexpectedly, and without being announced; "Your highneſs," he ſaid, "does

not

not deal fairly with me; for you promiſed to inform me if any diſaffected perſons caballed againſt me, and you now know what intrigues are carrying on againſt me." "I know not," replied the prince, "that any thing is now in agitation which will be detrimental to the emperor and the country." "I will take care," returned Biron, "to place this empire in ſuch a ſituation, as no other perſon is capable of doing; for I am neither deficient in knowledge or in power." "The nobles muſt aſſiſt you," ſaid the prince, "and you muſt all be accountable to the emperor." "Am I not regent," replied Biron, "with abſolute authority? Such aſſertions, ſir, may occaſion great commotions; and your highneſs muſt know, that whenever factions ariſe, the emperor and the country are in danger; and what muſt be the inevitable conſequence, if you and I ſhould be at variance?" "A maſſacre!" returned the prince with great warmth, and putting at the ſame time his hand upon his ſword.

After much altercation, the prince accuſed

cuſed Biron of having forged the teſtament and ſignature of the empreſs; and the duke quitted the apartment with theſe words: "This affair, ſir, is of ſuch importance, that it muſt be laid before the principal nobility of the realm." Repairing inſtantly to his palace, he ſummoned the cabinet council, the ſenate, and the principal nobility, and acquainted them with the converſation which had paſſed between him and the prince. But when the imperial miniſter, Count Keyſerling, who was preſent, endeavoured to juſtify the prince, he called the prince a liar, who had miſrepreſented the converſation; and turning to Keyſerling, ſaid, "We want here no advocates, and no lawyer's quirks;" and walking up and down the apartment in great agitation, exclaimed, "Am I a poiſoner! or do I contend for the throne and the ſcepter!"

The princeſs Anne, who had been informed of the miſunderſtanding, now arriving, he turned to her, and explained with great bitterneſs what had already paſſed. Anne was exceedingly affected, and appeared

to blame her huſband's conduct. At length, the prince himſelf being ſummoned, was prevailed upon to attend, and ſoon afterwards made his appearance. Being reprimanded by Biron, and by ſeveral who were preſent, in the groſſeſt terms, his highneſs at length ſubmitted to demand pardon, the tears ſtarting from his eyes from this neceſſary but degrading conceſſion; and the affair was huſhed up.

Soon afterwards, the regent ſent a meſſage by Marſhal Munich, ordering the prince to reſign his military employments, and not to ſtir out of his chamber. But this ſtate of things could not laſt long. The regent, at variance with the parents of the emperor, ſuſpicious of plots forming againſt him, and deteſted by the nation in general, became agitated and uneaſy, felt the precarioufneſs of his preſent ſituation, paid his court with great aſſiduity to the princeſs Elizabeth, and ſeems even to have formed the deſign of marrying her to the prince, his eldeſt ſon, and of raiſing her, or her nephew the duke of Holſtein, to the throne of Ruſſia. He

was imprudent enough to declare publicly, that if the princeſs Anne was refractory, he would ſend her and her huſband into Germany, and place the duke of Holſtein on the throne.

While he was fluctuating concerning his future conduct, and laying plans to remove thoſe who gave him umbrage, his own ruin came from a powerful quarter which he did not expect, and was not prepared to reſiſt. Marſhal Munich, ſecretly diſpleaſed with the regent at not being appointed generaliſſimo of the Ruſſian forces, fomented the diſcontents, awakened the ſuſpicions of the princeſs Anne, and prevailed upon her to permit him to arreſt the duke of Courland. His offer being accepted, he ſucceeded in ſecuring the perſon of the regent, and arreſted him on the 18th of December, only twenty days after he had been appointed to the regency. Lieutenant-colonel Manſtein, who was employed by Munich on that memorable occaſion, and who has related the tranſaction in his Authentic Memoirs, penetrated, at the head of only twenty men,

men, into the palace inhabited by the duke of Courland, though guarded by forty ſoldiers, who were placed under the windows of the regent's bed-chamber, and by numerous centinels poſted in the ſeveral apartments through which he was to paſs. Being perſonally known to the centinels, they permitted him to paſs, thinking that he had an affair of conſequence to communicate to the regent. Having burſt open the door of his bed-chamber, he approached the bed, in which the duke and dutcheſs were ſo faſt aſleep, that the noiſe did not awaken them. On drawing the curtains, both ſtarted up in ſurpriſe, and the duke inſtantly got out of bed with an intention to eſcape, but was prevented by Manſtein, who threw himſelf upon him, and held him faſt till the ſoldiers came to his aſſiſtance. In this interval the duke had diſengaged himſelf from Manſtein, and endeavouring to burſt from the ſoldiers who had laid hold of his arm, received ſeveral blows from the but-ends of their muſkets. Being at length thrown down on the floor, his mouth gagged with a

handkerchief, and his hands tied behind him with an officer's ſaſh, he was led to the guard-room, where being covered with a ſoldier's cloak, he was conveyed in a carriage to the winter palace, in which the princeſs Anne reſided. While he was leading away, the dutcheſs ſprang out of bed, and though only in her ſhift, ran after him, ſcreaming, in an agony of deſpair, into the ſtreet, till being forced away by the ſoldiers, ſhe dropped down upon the ſnow, and would have periſhed with cold, if the captain of the guard had not ſent for ſome clothes to cover her, and re-conducted her to her apartment.

The next day the duke and his family were conveyed to the fortreſs of Schluſſelburgh; and in June were removed to Pelim, a ſmall town in Siberia, where he was impriſoned in a wooden houſe under the ſtricteſt confinement. Fortunately he did not long occupy this dreary priſon. The empreſs Elizabeth had no ſooner aſcended the throne, by the depoſition of Ivan, than ſhe recalled Biron from his impriſonment; and

if

if his misfortunes had not ſoftened his vindictive ſpirit, he enjoyed the pleaſure of ſeeing his enemy, Marſhal Munich, occupy that priſon which he had juſt quitted.

Biron was transferred to Yaroſlaf, where he had a comfortable manſion aſſigned to him and his family, five roubles a day, and the permiſſion of hunting within twenty or thirty miles of Yaroſlaf. In this ſituation, wretched when contraſted with his former dignified ſtation as the omnipotent favourite of Anne, or as regent of Ruſſia, but a paradiſe when compared with his priſon at Pelim, he paſſed his days during the whole reign of Elizabeth.

On the demiſe of Elizabeth, Peter the Third recalled Biron to Peterſburgh, but did not reinſtate him in the dutchy of Courland. Biron had refuſed, during his confinement, to reſign his right to that dutchy, although he was offered his liberty, and a penſion of 100,000 roubles per annum; nor could he be prevailed upon by Peter the Third to abdicate in favour of the duke of Holſtein; nobly adding, that nothing ſhould

induce him to do ſuch an injury to his family; but that he would prefer even a ſecond impriſonment.

Catharine, ſoon after the revolution which placed her on the throne of Peter the Great, took compaſſion on his misfortunes, and reſtored him to his former dignity.

Biron repaired to Mittau in 1763, twenty-eight years after he had been elected duke of Courland, and for the firſt time ſince he had been raiſed to that dignity. Prince Charles of Saxony, although ſupported by a large party in Courland, yet receiving no aſſiſtance from his father Auguſtus the Third, was compelled to retire before the Ruſſian forces; and Biron received the oaths of allegiance and fidelity from the whole nation.

In 1764, he obtained from the king and republic of Poland the inveſtiture of Courland for his eldeſt ſon Peter, the preſent duke; in 1769, abdicated in his favour; and, in 1772, cloſed at Mittau, in the eighty-third year of his age, a life of almoſt unparalleled viciſſitude.

The

The conſtitution * of Courland is of ſo complicated a nature, and the rights of Poland, of the duke, and of the diet, ſo interwoven, that in order to form a diſtinct and accurate relation, it will be neceſſary to ſeparate and explain them with ſome degree of minuteneſs.

From the hiſtorical ſketch of the ſucceſſion to the ducal throne of Courland, it will appear that Courland is a male-fief, dependent on and conferred by the crown of Poland.

The territorial ſuperiority of Poland is ſettled by the *Pacta Subjectionis*, or acts of vaſſalage, ratified by the king of Poland and duke of Courland, when the duke receives his inveſtiture.

This territorial right conſiſts principally in the following articles: The king inveſts each duke with the dutchies of Courland and Semigallia as fiefs of Poland; and re-

* For the hiſtory and conſtitution of Courland, ſee Lænngnich, Juſ. Publ. Reg. Poloni. lib. I. c. x. ſec. v. to vii. and Ziegennorn's Staats Recht der Hertzogthuemer Courland and Semegallen.

ceives his homage as from a vaſſal to his liege lord.

If Poland is engaged in war, the duke is bound to furniſh 200 horſe, or 500 infantry; and the nobles are likewiſe bound to ſupply, as their quota, 200 horſe, or 30,000 dollars in the firſt year of the war, provided no Poliſh or enemy's troops are quartered in Courland, and 10,000 dollars in each of the ſucceeding years.

The money of Courland is to bear on one ſide, the head of the king, or the arms of Poland and Lithuania; it muſt alſo be ſtruck upon the ſame ſtandard as the coin of Poland. The Poliſh money muſt paſs current in Courland, and the Courlandiſh in Poland.

The king ſettles all diſputes between the duke and his ſubjects, receives remonſtrances againſt any infringement of privileges from the diet of Courland againſt the duke, and can order the redreſs of grievances.

The diet of Poland muſt finally ratify all laws which tend to alter or new-model the conſtitution of Courland, and which have been

been paſſed by the duke and diet of Courland, to be referred to the king and republic of Poland. The Poliſh diet alſo confirms the creation of nobles, and the *indigenat recht*, or right of naturalization, recommended by the duke and diet of Courland. It is alſo the ſupreme court of judicature, to which any noble may appeal, from the deciſion of the courts of juſtice in Courland. In all civil cauſes above the value of 500 Poliſh florins, and in all criminal caſes ſpecified in the ſtatutes of Courland, the final deciſion is left to the king and republic of Poland. The king in return binds himſelf to ſupport the conſtitution of Courland, the duke in all his prerogatives, and the nobles and burghers in all their privileges.

The duke and diet of Courland enjoy the ſupreme authority in all other circumſtances, not contradictory to their feodal dependance on Poland, or which are not mentioned in the acts of ſubjection.

The duke is inveſted with the executive power, and the general adminiſtration of affairs. He has a negative in all the proceedings

ceedings of the diet, confers the principal charges, both civil and military, enjoys the right of pardoning criminals, judges in particular cafes without appeal, in all civil cauſes below 500 Poliſh florins; and in delinquencies and crimes not ſpecified in the ſtatute law of Courland.

The duke, ſtrictly ſpeaking, has the right to declare war, make peace, or contract alliances; but although ſome inſtances of his exerciſing theſe prerogatives have occurred in the hiſtory of Courland, yet he uſually conſults his diet on theſe occaſions. His revenues are very ample, and are derived from the ducal demeſnes, which are ſuppoſed to contain one-third of the duchy, from tolls and cuſtoms, manerial and feudal rights, fines, and confiſcations of goods, amounting to not leſs than £. 160,000 per annum, which almoſt entirely belongs to his own privy purſe, as the expences of his court are trifling, and he is not permitted, by the laws of his country, to keep on foot more than 500 troops.

The prerogatives of the duke are circumſcribed

ſcribed by his vaſſalage to Poland already mentioned, by the diet of Courland, and the privileges of the nobles.

Diets are ordinary or extraordinary; and both are convoked by the duke, either at his own ſuggeſtion, or at the requeſt of the nobles.

Extraordinary diets are ſummoned as occaſion requires. Ordinary diets are convoked every two years, about ſix weeks previous to the meeting of the Poliſh diet. With the circular letters expedited to the different pariſhes for the election of the deputies, the duke alſo ſends the propoſitions called Deliberations, which are to be laid before the diet, and muſt, at the ſame time, tranſmit any grievances, which are complained of by the body of nobles, for the conſideration of that aſſembly.

The deputies muſt be noble, and are elected by the nobles in their reſpective pariſhes. The number of deputies returned is uncertain, becauſe ſometimes one pariſh chooſes one or two deputies, and not unuſually three pariſhes join in appointing only one, but

may

may be eſtimated at not more than twenty-ſeven, the number of pariſhes.

The diet aſſembles generally at Mittau, and immediately chooſes, by a majority of votes, a marſhal or preſident. The deputies then, with the marſhal at their head, repair to the palace, are received by the duke in ſtate, kiſs his hand, and are entertained at dinner.

The diet, conjointly with the duke, impoſes taxes, and paſſes all laws and regulations which do not infringe on the feodal rights of Poland, or alter the conſtitution of the country; as all ſuch propoſitions, after having been approved by the duke and diet, muſt be tranſmitted to the Poliſh diet for its approbation or rejection.

In all grievances, the diet firſt ſubmits them to the duke; and if he conſiders them as nugatory, and refuſes to redreſs them, the deputies enjoy the privilege of laying their remonſtrances before the diet of Poland, as the ſupreme court of legiſlature.

All queſtions are carried or rejected by the majority; and each deputy muſt vote according

ing

ing to the inſtructions he has received from his conſtituents: but in all inſtances wherein the conſtituents have not fully inſtructed their deputy, his vote is null, and the ſentiments of the majority prevail.

From this abſurd method of giving previous inſtructions, and the attempts of the deputies to elude them, many inſtances occur in the hiſtory of Courland, in which the minority have prevailed over the majority: this cuſtom has alſo given riſe to ſeveral attempts which, not without ſucceſs, have been made for a ſingle deputy to aſſume to himſelf the right of the *liberum veto* * in Poland, though under another name, and to be the means of diſſolving the diet from his ſole oppoſition.

At the diſſolution of the diet, the deputies are bound to acquaint their conſtituents in perſon with the tranſactions of that aſſembly, a circumſtance which neceſſarily gives riſe to factions, and has not unfrequently occaſioned civil commotions.

* See Book I. ch. vi.

Many

Many of the privileges of the nobles are enormous, and inconſiſtent with every principle of ſound policy. A noble cannot be arreſted, by order of the duke, for the moſt flagrant act, except within twenty-four hours after the commiſſion of the crime; if he eſcapes during that time, he cannot be arreſted without an order from the king and republic of Poland; he cannot be impriſoned till he is found guilty; and cannot be executed, but by the permiſſion of the king and republic of Poland.

The higheſt and moſt important officers of ſtate muſt be drawn from their body.

Nobles are exempted from the payment of all taxes and impoſts whatſoever, being only bound, according to the feodal tenure, in time of war to furniſh their quota of cavalry; and all goods and merchandiſe imported or exported for their uſe pay no duty.

Their power over their peaſants is, if poſſible, more unbounded than that which the Poliſh gentry poſſeſs over their's. They enjoy the criminal juriſdiction without ap-

peal; and though certain forms and limits are preſcribed by the laws, yet, in effect, no ſuch limitation takes place. In judging delinquencies and crimes, a noble can form a ſummary court of juſtice, compoſed of himſelf, three or four friends, and an attorney; and, after ſuch a mock-trial, may order the delinquent to immediate execution, or to corporal puniſhment.

By the conſtitution of Courland, the duke is aſſiſted in the adminiſtration of affairs by a privy council, called the Supreme Council, compoſed of four high counſellors, and two civilians or doctors, all appointed by the duke, but holding their places for life, unleſs proved to be guilty of malverſation, and removed by the king of Poland. The four high counſellors are, the high ſteward, the chancellor, the burgrave, and the marſhal.

The province of this council is to adviſe the duke in all concerns of ſtate, to take care that the rights and privileges of the ſubject are not infringed, and to make remonſtrances againſt any grievances.

The

The four high counſellors form alſo, in conjunction with the duke, the criminal court of judicature for the nobles, to which an appeal lies from the inferior courts of juſtice; and which judges, without farther appeal, all crimes excepting premeditated murder, wilful burning of houſes, robbery, rapes, or open violence, which, as being capital, are referred to the king of Poland.

The ſame four high counſellors are inveſted with the regency, whether in the minority, abſence, or ſickneſs of the duke, or on a vacancy of the ducal throne. In theſe caſes, the two civilians, who are conſidered as the duke's counſellors, are excluded, to the great detriment of the country, as they are uſually the moſt enlightened counſellors, and not being nobles, are more inclined to encourage the arts and ſciences, manufactures and commerce, and are particularly attentive, that the privileges of the lower orders ſhould be preſerved.

The enormous privileges of the nobles have been the occaſion of fomenting the troubles,

troubles, and exciting the civil commotions, which have overwhelmed Courland for this laſt century. Its internal hiſtory is little elſe than a continued ſeries of diſputes between the duke and the nobles; the boaſted freedom of the country is a ſpirit of faction under the name of liberty, which, as in Poland, means an ariſtocratical licentiouſneſs, oppreſſing others, but free itſelf to commit all kinds of enormities.

In all countries, wherever the ſpirit of feudal anarchy and feudal deſpotiſm (the worſt ſpecies of tyranny) prevails, the peaſants are oppreſſed, and agriculture is in a declining ſtate; the merchants are deſpiſed, and commerce languiſhes; men of learning are neglected, and letters are uncultivated; the nobles and gentry alone enjoy the right of being land-holders, and center in themſelves the whole powers and emoluments of government. Daily, however, this odious ſlavery loſes ground; the age becomes more enlightened; the citizen, the merchant, the manufacturer, and the peaſant, gain eſteem and conſequence; and the time perhaps is

not diſtant, when they will burſt the ſhackles, which prevent them from enjoying the common rights of man.

If the preſent duke ſhould die without iſſue, the right of appointing the duke, according to the rules of ſucceſſion lately eſtabliſhed, would be veſted in the diet of Courland, to be approved of by the king and republic of Poland. But as Courland is too ſmall a ſtate to act independently of the great neighbouring kingdoms, the nomination of the new duke would entirely depend on the will of that power which has moſt preponderance in the north, and conſequently moſt influence in Poland.

When Poland was the great preponderating power, Courland was ſubſervient to that republic; when Sweden, under Guſtavus Adolphus, and his immediate ſucceſſors, roſe ſuperior to Poland, Courland was over-ran by the Swedes, and its ſovereign led into captivity *. When the fortune of the houſe of Vaſa declined, and Ruſſia gained

* James duke of Courland, taken priſoner in 1458, by Charles X. king of Sweden.

the aſcendancy, Courland became almoſt a province of Ruſſia; its dukes were elected and depoſed, its councils directed by the influence of the court of Peterſburgh, and its dependence on Poland was a mere formality. But as Ruſſia has lately loſt her influence in Poland, the duke of Courland has emancipated himſelf from his abſolute dependence on the court of Peterſburgh. But whether this emancipation is temporary or permanent muſt depend on the fate of the preſent war, and the iſſue of the pending negotiations.

The prevailing religion of Courland is the Lutheran, but all other religions are tolerated; and by the acts of ſubjection, the Roman catholics particularly are capable of holding all military and civil offices, that of the chancellor and a few others excepted.

The language of the natives in Courland is a dialect of the Livonian or Lettiſh, the ſame language which is ſpoken, with a little variation, by the natives in Livonia and Eſthonia, and is probably derived from the Finniſh. The nobles and gentry, being de-

ſcended from German ſettlers, ſpeak German; and that tongue is always uſed in the debates of the diet.

CHAP.

CHAP. VI.

Memmel—Journey to Konigſberg—Sketch of the Hiſtory of Pruſſia—Warſaw—General Remarks on the preſent Situation of Poland.

FROM Mittau we traverſed the dutchy of Courland, a country ſwelling into gentle hills, and fertile in corn, hemp, and flax. The inhabitants export thoſe commodities from the port of Libau on the Baltic, the only commercial town of Courland; and import in return, coffee, tea, wines, cloth, ſalt, and other foreign merchandize, which ſupply the interior conſumption. The country is moſtly open; but in ſome parts clothed with foreſts of pine and fir, dotted with occaſional groves of fine oak, and ſprinkled with much underwood. The villages are neat, the ſcattered cottages and gentlemen's ſeats prettily

ſituated amid clumps of trees, and the inns provided with beds, a great luxury to travellers juſt come from Ruſſia. The roads are extremely indifferent, and in this ſeaſon of the year ſcarcely paſſable.

We quitted Courland, near Polangen, a ſmall town of Poland, and, croſſing over a narrow ſlip of Poland, entered Pruſſia, and ſoon reached Memmel, an ill-built town with narrow dirty ſtreets, but remarkable for its extenſive commerce.

Memmel is provided with the fineſt harbour in the Baltic. In 1784, 996 ſhips, amongſt which were 500 Engliſh, arrived here. The imports are chiefly ſalt, iron, and ſalted herrings; the exports, which greatly exceed the imports, are amber, corn, hemp, flax, and particularly timber. An Engliſh conſul reſides here. The trade is daily increaſing, on account of the high duties which the court of Ruſſia has laid on the imports of Riga.

Memmel is ſituated on the northern extremity of the *Curiſche Haf*, an inlet of the ſea about ſeventy miles in length, which is here

here joined to the Baltic by a narrow ſtrait. Having ferried over the Haf, we purſued our route along a ſpit of land, or a narrow peninſula encloſed between the Curiſche Haf and the Baltic. This ſpit of land is a ſandy beach, about eighty miles long, and ſcarcely three broad, and almoſt ſolely inhabited by fiſhermen, who build their huts on the other ſide of the ſandy eminence which forms the beach; and we ſcarcely ſaw a ſingle houſe from the time we quitted Memmel, till we came to a ſmall village encircled with a few corn-fields and ſtubbed pines, about forty-four miles from Memmel, where we breakfaſted the next morning.

During our route, one wheel of our carriage ran cloſe to the edge of the water; and as the weather was mild and the ſea calm the waves did not paſs their bounds, and force us to drive along the deep and ſloping ſand-hills which bound the ſhore.

As the rate at which we travelled ſcarcely exceeded two miles and a half in the hour, we amuſed ourſelves during the greateſt part

of the day with walking on the beach, and picking up the pieces of amber which are thrown aſhore by the waves of the ſea in ſuch large quantities as in ſome parts to ſeem like heaps of ſmall ſhells.

After creeping near forty hours, we at length reached the ſouthern termination of the ſpit of ſand, and paſſed through a country agreeably diverſified with hill and dale, and appearing ſtill more agreeable from the contraſt of the barren and deſolate ſand which we had juſt quitted. We reached Konigſberg at midnight, after having employed fifty hours in traverſing 20 German, or 90 Engliſh miles.

Pruſſia, of which Konigſberg is the capital, is formed into two great diviſions, Eaſtern and Weſtern Pruſſia, both of which were united in the fourteenth century, ſubject to the Teutonic knights, and governed by a grand maſter of that order. During that and the following century, many diſputes aroſe between the Teutonic knights and Poland concerning the boundaries of

Poland

Poland and Pruſſia: and the grand maſter was conſtrained to do homage to the King of Poland for the poſſeſſion of Pruſſia.

At length Albert, a prince of the electoral houſe of Brandenburgh, being choſen grand maſter of Pruſſia in 1512, compromiſed the matter in diſpute with Poland, by ceding to that crown Weſtern Pruſſia, and reſerving to himſelf Eaſtern Pruſſia, to be held as a ducal fief, deſcendible to his heirs male, and in failure of iſſue male, to revert to the crown of Poland. In conſequence of this agreement, Albert received, in 1525, the inveſtiture of Eaſtern Pruſſia from Sigiſmond, king of Poland; and at his death tranſmitted it quietly to his ſon Albert Frederic.

Albert Frederic being inſane, his Pruſſian dominions were governed by his couſin George Frederic, and afterwards by John Sigiſmond, elector of Brandenburgh, who had eſpouſed Anne, eldeſt daughter of the duke of Pruſſia.

In 1611, John Sigiſmond obtained from Sigiſmond the Third, king of Poland, the

inveſtiture of ducal Pruſſia, as a vaſſal to the crown of Poland; and, on the death of his father-in-law, in 1618, ſucceeded, without oppoſition, to that dutchy; thus annexing to his electoral dominions this valuable country.

In 1658, Frederic William, deſervedly ſurnamed the Great Elector, obtained from John Caſimir, and the republic of Poland, the abolition of his vaſſalage for Eaſtern Pruſſia, and the erection of that dutchy into an independent ſovereignty.

His ſon Frederic raiſed that dutchy into a kingdom, and, in 1701, was crowned king of Pruſſia at Konigſberg; and the late king, Frederic the Second, wreſted from Poland, by the treaty of partition, Poliſh or Weſtern Pruſſia, and re-united the whole country under one ſovereignty.

Konigſberg, the capital of the kingdom of Pruſſia, is about five miles in circumference; and, including the garriſon of 7,000 men, contains 60,000 inhabitants. It ſtands on the Pregel, a navigable river which flows from the north-weſtern provinces of Poland,

land, and here falls into the eaſtern extremity of the *Friſche Haf*, an inlet of the Baltic. No ſhips drawing more than ſeven feet water can paſs the bar, and come up to the town; ſo that the large veſſels anchor at Pillau, a ſmall town on the Baltic, which is the port of Konigſberg; and the merchandize is ſent in ſmaller veſſels to this place.

The trade of Konigſberg is very conſiderable, as will appear from the following table of the exports and imports for 1784:

GOODS

GOODS exported from KONIGSBERG, in 1784.

		To Holland.	To Britain and Ireland.	To France, Spain, and Portugal.	To Denmark and Norway.	To Sweden.	To Bremen, Lubec, & Hamburg.	To Pomerania and Embden.	To Dantzig and Elbing.	Totals.
Wheat	Laſt	1,930–	1,422–	1,121–	444—8	573–	936–	125–	—	6,551—8
Rye	—	6,624–	990–	34–21	7,353–	8,303–	2,992–	2,728–	—	29,024–21
Barley	—	402–	2,553–	153–	2,335–	2,522–	135–14	—	—	8,100–14
Malt	—	—	—	—	—	154–	—	—	—	154–
Oats	—	—	1,462–	219–12	218–	255–	129–	5–	—	2,290–12
Peaſe	—	370–	1,420–	16–	117–	308–	151–	53–15	12–19	2,447–34
Sowing Linſeed	Barrels	—	301–	—	118–	420–	350–	119–	201–	1,519–
Cruſhing	Laſt	2,946–	1,290–47	—	42–	—	—	—	—	4,278–47
Hempſeed	—	527–	—	—	21–	—	—	–46	1–33	550–22
Hempſeed-oil	Caſks	—	—	—	11–	—	—	—	289–	300–
Hemp	Laſt	1,207	26–	931–40	16–	14–	56–	726–	404–57	3,390–37
Flax	—	1–	132–	43–	20–11	–1–	16–	33–	34–18	280–29
Tow	—	69–	—	—	2–34	1–	4–	251–	276–11	603–45
Pot-aſhes	Sch.	2,712–	3,484–	562—7	840–	12–	138–	1,138–	8—7	8,895—4
Weed-aſhes	Laſt	88–10	1–11	—	—3	—	—	1–	–11	92–11
Wax	Stone	1,776–	101–	160–	—	—	3,432–	—	—	5,469–
Briſtles	—	2,845–	2,724–	—	—	37–	259–	—	99–	5,964–
Tallow	—	42–	1,386–	—	118	198–	—	755–	509–	3,008–
Yarn	Schock	3–	4,103–	—	—	—	—	20–	121–	4,247–
Leather	Stone	—	—	—	—	—	—	27–	312–	339–
Planks	Schock	48–28	115—9	115–52	83–47	–10	11–42	4–25	—	379–33
Logs	Piece	626–	621–	72–	305–	—	—	—	—	1,624–

GOODS

Ships cleared 1,986.

GOODS imported at KONIGSBERG in PRUSSIA, in 1784.

Goods by the Pound.

Lead	517,933
White lead	12,908
Lead ſhot	209,078
Steel	79,300
Tin	108,370
Copper	141,982
Sugar	2,412,306
Treacle	543,914
Almonds	75,856
Coffee	57,114
Currants	51,715
Cloves	1,472
Pepper	64,867
Ginger	36,303
Raiſins	95,744
Prunes	9,130
Cinnamon	1,272
Cordamum	267
Rice	166,503

Tea

Tea - - - -	6,604
Tobacco - - -	—
Brazil wood - - -	224,756
Indigo - - -	32,192
Copperas - - -	63,162
Saffron - - -	183
Smalts - - -	17,957
Allum - - -	134,979
Iron wire - - -	110,178
Braſs wire - - -	7,983
Iron plate - - -	—
Engliſh ſole leather - -	3,988

Goods by the Schip.

Iron - - -	12,183
Dry fiſh - - -	445

Goods by the Laſt.

French ſalt - -	5,166	—	—
Spaniſh ditto - -	2,345	16	—
Pomeranian ditto -	4,163	—	—
Coals - - -	158	—	5
Lime - - -	—	—	—

Goods by the Caſk.

Dutch herrings - -	1,081

Swediſh ditto - -	32,980
Tar - - -	1,054
Train oil - - -	559
French wine - - -	12,214
Frontiniac ditto - -	112
Rheniſh and Moſel ditto -	116
Spaniſh ditto - - -	57
Canary ditto - - -	—
French brandy - -	734
Vinegar - - -	546
Sweet oil - - -	147

Goods by the Value.	Rix-dollars.
Broad cloth - - -	60,778
Medicines and drugs - -	1,161
Burgundy and Champaign wine	22,430

Goods by the Cheſt.

Tin plate - - -	182
Window glaſs - - -	873

Goods by the Piece.

Oyſters - - -	14,375
Lemons and oranges - -	278,838
Chalder grindſtones - -	365

Ships entered 1,964.

Konigſberg

Konigſberg contains an univerſity, founded by Albert of Brandenburgh. According to the original endowment there were forty profeſſors; but their number is now reduced to ſixteen. Each profeſſor receives a ſalary of about £. 50 per annum, which may be increaſed by private lectures. In 1775, the univerſity contained 800 ſtudents, of whom 200 are lodged and boarded at the expence of the crown. There are three public libraries in the town, the Royal or Univerſity Library, the Town Library, and the Wallenrodt Library, ſo called, becauſe it was given by Martien von Wallenrodt, in 1650.

In the laſt-mentioned collection I was ſhewn the original ſafe-conduct granted to Luther by Charles the Fifth, and ſigned by that emperor's own hand. Truſting to this ſafe-conduct, Luther appeared at the diet of Worms, notwithſtanding the remonſtrances of his friends, who reminded him of the fate of John Huſs on a ſimilar occaſion. But Luther, with that undaunted ſpirit which accompanied all his actions, ſilenced his friends by declaring, that he was lawfully

called

called to appear in that city; and "thither will I go," he added, "though as many devils as there are tiles on the houſes were combined againſt me."

As he could not be prevailed upon, either by threats or intreaties, to retract his opinions, ſome of the Romiſh clergy, with that ſcandalous ſophiſtry which deemed that faith ought not to be kept with heretics, propoſed to imitate the example of the Council of Conſtance, and to condemn Luther to the flames. But as the members of the diet ſtartled with horror at another violation of the public faith, and as Charles peremptorily refuſed to ſtain his adminiſtration by ſuch an ignominious action, Luther was permitted to retire in ſafety *, and completed the reformation, which was introduced into theſe parts by Albert of Brandenburgh, the firſt duke of Pruſſia.

March 29. About ſeventy miles from Konigſberg, we quitted the Black Eagle of Pruſſia and recognized the White Eagle of

* Robertſon's Charles V. vol. ii. p. 123.

Poland; and, paſſing through ſeveral miſerable villages, which announced the wretchedneſs of Poland, we reached, on the evening of the 31ſt, Warſaw, without meeting with a ſingle object worthy of attention, or a ſingle adventure worthy of notice.

This ſecond viſit to Warſaw furniſhed me with little additional matter. Having before deſcribed our preſentation at court, and reception from Staniſlaus Auguſtus, I ſhall not again repeat ſimilar marks of condeſcendence and benignity with which I was honoured by that amiable ſovereign, nor the hoſpitable manner in which I was again received by the Poliſh nobility.

The reader will recollect that, in 1779, when I firſt viſited Warſaw, I deſcribed Poland as almoſt a Ruſſian province, governed by the embaſſador of Catharine the Second.

In my ſecond tour, I found the whole kingdom in a ſtate of the ſame ſubjection to Ruſſia as in my firſt expedition, and fatally announcing, by its total dependance on a foreign power, its ſad decline from its former preponderance in the north, and the

wretched

wretched conſtitution by which it is governed.

Although it is foreign to my purpoſe to take notice of any changes which may have taken place in Poland ſince my departure, in May 1785, yet I cannot avoid remarking, that in 1789 and 1790, the empreſs of Ruſſia entirely loſt her influence in that country, withdrew her troops, and recalled her embaſſador; and that the natives had made ſome efforts to increaſe and diſcipline their army, and to raiſe their conſequence in the conſideration of Europe.

The permanent council has been aboliſhed, and ſeveral alterations introduced into the form of government, tending to emancipate the country from the influence of Ruſſia, and to reſtore it to itſelf, if it is poſſible to reſtore a country in which anarchy is the characteriſtic feature.

But as long as the monarchy continues elective, as long as the nobles and gentry alone enjoy the right of poſſeſſing land, and as long as the peaſants are ſlaves, all alterations in the form of government muſt be

merely nominal, and its eſſence muſt ſtill continue the ſame. The king muſt always be a puppet in the hands of his moſt powerful neighbour, and the nobles, in whom are veſted the ſupreme authority, turbulent, and above controul, except awed by ſome foreign power.

In fact, Poland has no nerve or vigour of its own, but receives its impulſe from one of the great neighbouring powers by which it is ſurrounded. By the change of northern politics, the king of Pruſſia, in alliance with Great Britain and Holland, has ſucceeded to the influence before poſſeſſed by Catharine the Second, and directs the republic almoſt with the ſame unbounded ſway. But the fate of Poland, like that of its vaſſal the duke of Courland, muſt ultimately depend upon the event of the preſent war kindled between Ruſſia on one ſide, and the Swedes and the Turks on the other, and on the final tendency of the negotiations, either to enlarge or to confine the preponderance of Ruſſia in the ſcale of the North.

APPENDIX.

APPENDIX.

N° I.

Geographical Diviſion of the Ruſſian Empire into Governments, Provinces, and Diſtricts.

AS the new diviſion of Ruſſia into governments, provinces, and diſtricts, has totally altered the geography of that vaſt empire; and as no accurate account of the general diviſion yet given to the public has fallen under my obſervation, I ſhall here ſubjoin a liſt communicated to me in February, 1785, from undoubted authority.

In comparing this liſt of governments with that given in p. 323 of this work, the reader will find a difference in the number and names of the governments; for inſtance, this liſt enumerates 41, the other 40 governments. This liſt mentions the governments

of Archangel, Catherinenſlaf, Olonetz, and Caucaſus; and the other thoſe of Aſtracan, Azof, and New Ruſſia. But this difference may eaſily be reconciled, by conſidering that the former liſt was made in 1782, the latter in 1784, when ſeveral alterations had taken place in the names of the governments, particularly that Olonetz was formerly included in the government of Novogorod, and Archangel in that of Vologda, from which they have been ſince ſeparated; and that the names of New Ruſſia and of Azof have been changed for that of Ecatherinenſlaf; and that the government of Caucaſus has been lately added, and compriſes the government of Aſtracan.

Preſent Diviſion of the Ruſſian Empire into Governments, Provinces, and Diſtricts.

Forty-one Governments.

I. Government of St. Peterſburgh.

This government compriſes that tract of country called Ingermanland, or Ingria, wreſted

wreſted by Peter the Great from the Swedes, and confirmed to Ruſſia at the peace of Nyſtadt, in 1721.

It is divided into 10 diſtricts.

1. St. Peterſburgh.
2. Oranienbaum, on the gulph of Finland.
3. Yſamburgh, on the river Luga, diſcharging itſelf into the gulf of Finland.
4. Luga, on the upper part of the ſame river.
5. Narva, on the river Narova, which falls into the gulf of Finland.
6. Gvof, near the eaſt ſide of lake Peipus, on a rivulet called Gvofka.
7. Rokeſtven, or Rokeſtvenſk, on the rivulet Oredeſh, falling into the Luga.
8. Sophia, near Zarſkoe Zelo.
9. Schlueſſelburgh, on the Neva, where this river iſſues from the Ladoga.
10. New Ladoga, on the river Volkhof, between the lake and the channel of the Ladoga.

II. Government of Olonetz,

Formerly included in the government of Novogorod,

Contains 5 diſtricts.

1. Petroſavodſk, on the river Schua, falling into the lake Onega.
2. Olonetz, on the river Olonza, falling into the eaſt ſide of the Ladoga.
3. Vytegra, on the river of the ſame name, falling into the ſouth ſide of the Onega.

4. Kargopol, near the river Onega, at its origin from the lake Latcha.
5. Povenetz, on the north ſide of the Onega, where the rapid rivulet Povenetz falls into it.

III. Government of Wiburgh, or Ruſſian Finland.

This government was formerly ſubject to Sweden, and comprized in Carelia; part was ceded to Ruſſia at the peace of Nyſtadt, in 1721, and part by the treaty of Abo, 1741.

It contains 6 diſtricts.

1. Wiburgh, on the north ſide of the gulf of Finland.
2. Willmanſtrand, near the lake Saima.
3. Frederickſham, on the gulf of Finland.
4. Nyſlot, near the lake Utruſs.
5. Kexholm, on two ſmall iſlands of the river Woxen, falling into the Ladoga.
6. Serdobol, on the north-weſtern ſide of the Ladoga.

IV. Government of Revel, or Eſthonia.

Revel was confirmed to the Swedes at the peace of Oliva, conquered by Peter the Great in 1710, and finally ceded to Ruſſia in 1721.

It contains 5 diſtricts.

1. Revel, on the Baltic ſea.
2. Baltic-Port, about 40 verſts weſtward from Revel.
3. Habſal,

3. Habſal, or Hapſal, a maritime town.
4. Weiſſenſtein, on the rivulet Saida, about 80 verſts from Revel.
5. Weſenberg, about 100 verſts from Revel, at about an equal diſtance from that town and Narva.

V. Government of Riga, or Livonia, ceded to Ruſſia in 1721.

It contains 9 diſtricts.

1. Riga, on the Duna, 14 verſts from its mouth.
2. Wenden, on the river Aa.
3. Wolmar, on the ſame river.
4. Walk, on a rivulet falling into the ſouth ſide of lake Wyrtz.
5. Werro, on the weſt ſide of lake Peipus.
6. Dorpt, on the river Em, or Embak, which iſſues from the lake Wyrtz, and falls into the Peipus.
7. Fellin, on the ſmall river of the ſame name.
8. Perneau, on the river of that name, near the Baltic Sea.
9. Arenſburgh, on the iſland Oeſel.

VI. Government of Pſkof,

Formerly a republic, ſubdued by Vaſſili Ivanovitch, and formerly compriſed in the government of Novogorod,

Contains 9 diſtricts.

1. Pſkof, called by foreigners Pleſkof, on the river Velika, or Velikaia.
2. Petchora, on the rivulet Simſha, falling into the ſouth part of the Peipus, or the lake of Pſkof.
3. Oſtrof, or Oſtroffk, on an iſland of the river Velika.

4. Opotchka,

4. Opotchka, on an iſland of the ſame river.
5. Novorſhef, on an iſland of the ſmall lake Padzo, through which flows the river Velikaia.
6. Velikie Luki, on the left ſide of the river Lovat, falling into the lake Ilmen.
7. Toropez, on the river Toropa, falling into the Duna.
8. Kholm, on the river Lovat.
9. Porkhof, on the river Schelef.

VII. Government of Novogorod,

A powerful republic, finally reduced by Ivan Vaſſilievitch II. and united to the Ruſſian empire,

Contains 10 diſtricts.

1. Novogorod, on the river Volkhof, near the lake Ilmen.
2. Kreſtetz, on the river Khlova, falling into the Mſta.
3. Staraia Ruſſa, on the river Poliſh, about 15 verſts ſouth of the Ilmen.
4. Valdai, on the weſt ſide of the lake of Valdai.
5. Borovitchi, on the river Mſta.
6. Tikhvin, on the rivulet of that name, falling into the Siaſs, which diſcharges itſelf into the Ladoga.
7. Uſtiuſhna, on the Mologa, falling into the Volga.
8. Tcherepovetz, on the river Schekſna, falling into the Volga.
9. Kiriloſ, on the ſame river.
10. Bieloſerſk, on the ſouth ſide of the Bieloſero, near the river Schekſna.

VIII. Government of Tver,

An independent principality, united to the Ruſſian empire by Ivan Vaſſilievitch, and

and compriſed in the government of Novogorod. It was ſeparated from Novogorod, and was the firſt government eſtabliſhed upon the new plan.

Contains 13 diſtricts.

1. Tver, on the Volga, where that river is joined by the Tverza.
2. Vyſhnèi Volotchok, on the river Zna.
3. Torſhok, on the Tverza.
4. Oſtachkof, on an iſland of the lake Seliger.
5. Rſhef-Volodimerof, on the left ſide of the Volga.
6. Subzof, on the left ſide of the ſame river.
7. Staritza, on the Volga.
8. Kraſnoi Kholm, on the river Schoca, which falls into the Mologa.
9. Koliaſin, on the Volga.
10. Kakin, near the Volga.
11. Beſhetzk, on the Mologa.
12. Kortchera, or Kortchef, on the Volga.
13. Veſiegonſk, on the river Mologa.

IX. Government of Smolenſko,

After being an object of contention, and reciprocally poſſeſſed by Poland and Ruſſia, was conquered by Alexey Michaelovitch in 1654, and finally ceded to Ruſſia at the peace of Moſcow, in 1666,

Contains 12 diſtricts.

1. Smolenſko, on both ſides of the Dnieper.
2. Poretchie, on the river Kaſplia, falling into the Duna.

3. Dukortchina,

3. Dukortchina, on the Dnieper.
4. Bieloi, on the ſmall river Vobiſha, falling into the Meſha, which diſcharges itſelf into the Duna.
5. Sytcherſk, on the river Vaſuſa, falling into the Volga.
6. Gſhatſk, or Gſhat, on the river Gſhat, falling into the Vaſuſa.
7. Viaſma, on the river Viaſma, falling into the Dnieper.
8. Dorogobuſh, on the Dnieper.
9. Yukhnof, on the Ugra, falling into the Occa.
10. Felna, on the Deſna.
11. Roſtarl, on the Oſter, which falls into the Soſh.
12. Kraſnoi, on a rivulet which falls into the Dnieper.

X. Government of Polotſk,

Diſmembered from Poland by the Treaty of Partition in 1772,

Contains 11 diſtricts.

1. Polotſk, on the Duna, at the mouth of the ſmall river Polota.
2. Driſſa, or Dryſin, on the river Driſſa, falling into the Duna.
3. Dunaburgh, on the right ſide of the Duna.
4. Reſitza, on the rivulet Reſiza, or Roſitten, falling into the lake Liubahn.
5. Liutzin, on the river Liſha, which falls into the river Velikaja.
6. Sebeſh, on the lake Sebeſh.
7. Nevel, on the lake Nevel.
8. Vifebſk, on the Duna.
9. Gorodetzk, or Gorodok, on a rivulet falling into the Duna.
10. Veliſh, on the Duna.
11. Suraſh, on the Duna.

XI. Government

XI. Government of Mohilef,

Diſmembered alſo by the Treaty of Partition in 1772,

Contains 11 diſtricts.

1. Mohilef, on the Dnieper.
2. Kopyſs, on the Dnieper.
3. Orſha, on the Dnieper.
4. Sennoi, near lake Sennoie, communicating with the Duna.
5. Babinovitchi, on the river Lutchoſſa, falling into the Duna.
6. Miſhiſlaf, on the river Vokra, falling into the Soſh.
7. Klimovitchi, on the river Oſter, falling into the Soſh.
8. Tſchauſy, on the river Pronja, falling into the Soſh.
9. Staroi Bykhof, on the Dnieper.
10. Rogatchef, near the Poliſh frontiers, where the river Drutz, or Drugez, falls into the Dnieper.
11. Belitzy, on a rivulet falling into the Soſh.

XII. Government of Orel,

Once a province of the government of Bielgorod,

Contains 13 diſtricts.

1. Orel, on the rivers Occa and Orel.
2. Kromy, on the Occa.
3. Mzenſk, on the rivulets Suſha and Mezna, falling into the Occa.
4. Bolkof, on the river Nugra, falling into the Occa.
5. Livny, on the left ſide of the river Soſſna, falling into the Don.
6. Feletz, on the left ſide of the river Soſſna.
7. Sieffk, on the river Sief, falling into the Deſna.

8. Maloi

8. Maloi Arkhangelſk, on the river Soſſna.
9. Dmitroſſk, on the rivulet Neruſer, falling into the Sief.
10. Dechkin, on the Occa.
11. Trubtcheſſk, on the left ſide of the Deſna.
12. Branſk, on the Deſna.
13. Karatchef, on the rivulet Sneſet, falling into the Deſna.

XIII. Government of Kaluga,

Formerly a province in the government of Moſcow,

Contains 12 diſtricts.

1. Kaluga, on the Occa.
2. Maloiaroſlavetz, on the ſmall river Luſha, falling into the Occa.
3. Barovſk, on the river Protva, falling into the Occa.
4. Taruſſa, on the Occa.
5. Likhvin, on the left ſide of the Occa.
6. Koſelſk, on the left ſide of the ſmall river Shiſdra, falling into the Occa.
7. Medynſk, on a rivulet falling into the Ugra.
8. Peremyſchl, on the left ſide of the Occa.
9. Mechovſk, on a rivulet falling into the Shiſdra.
10. Moſſalſk, on a ſmall river falling into the Ugra.
11. Serpeiſk, on the ſmall river Serpei, falling into the Ugra.
12. Shiſdra, on the river of the ſame name.

XIV. Government of Moſcow,

One of the moſt antient and moſt conſpicuous provinces of the Ruſſian empire. Its capital, Moſcow, built in 1147, was the reſidence

reſidence of the ſovereign, till Peter the Great transferred the ſeat of empire to Peterſburgh;

Contains 15 diſtricts.

1. Moſcow, on the river Moſcva, falling into the Occa.
2. Kolomna Moſcva, about 5 verſts from its junction with the Occa.
3. Bronnitzy, on the Moſcva, between Moſcow and Kolomna.
4. Podol, or Podolſk, on the river Pakria, falling into the Moſcva.
5. Nikitſk, on the ſame river.
6. Serpukhof, on the river Nara, 4 verſts from its junction with the Occa.
7. Vereia, on the river Protva, falling into the Occa.
8. Moſhaiſk, on the ſmall river Moſhaika, falling into the Moſcva.
9. Ruſa, on the left ſide of the river Ruſa, falling into the Moſcva.
10. Voſkreſenk, on the river Iſter, falling into the Moſcva.
11. Svenigorod, on the Moſcva, near the mouth of the Iſter.
12. Voloklamſkoi, or Volokolampſk, on the river Lama, falling into the Schoſha, which diſcharges itſelf into the Volga.
13. Klin, on the river Seſtra, falling into the Dubnia, which joins the Volga.
14. Dmitrof, on the ſmall river Vakhroma, which, uniting with the Seſtra, forms the river Dubnia.
15. Bogorodſk, on the river Kliaſma.

XV. Government

XV. Government of Tula,

Formerly a province of the government of Moſcow,

Contains 12 diſtricts.

1. Tula, on the river Upa, falling into the Occa.
2. Krapirna, on the ſame river.
3. Odeief, on the ſame river.
4. Venef, on the rivulet Venefka, falling into the Oſſetr, which joins the Occa.
5. Alexin, on the Occa.
6. Kachira, on the ſame river.
7. Bagoroditzk, on the river Upa.
8. Tſchern, on the rivulet of the ſame name, falling into the Suſha, which flows into the Occa.
9. Novoſyl, on the rivulet Nerutcha, falling into the Suſha.
10. Bielef, on the Occa.
11. Epiphan, on the Don.
12. Ephremof, or Yephremof, on the river Metcha, falling into the Don.

XVI. Government of Reſan,

Formerly a province of the government of Moſcow,

Contains 12 diſtricts.

1. Reſan, on the Trubeſh, falling into the Occa.
2. Saraiſn, on the river Oſetr.
3. Pronſk, on the river Pronca, falling into the Occa.
4. Mikhailof, on the river Pronca.
5. Skopin, on the ſmall river Ranvf, falling into the Occa.
6. Riachk, on a rivulet falling into the Voroneſk.

7. Kaſſimof,

7. Kaſſimof, on the Occa.
8. Raninburgh, on the river Reſe, falling into the Voroneſh.
9. Spaſk, on the Occa.
10. Yegorief, or Yegorjefſk, on a ſmall river falling into the Occa.
11. Sapoſhok, on a river falling into the Occa.
12. Donkof, or Dankof, on the Don.

XVII. Government of Volodimir,

Formerly a province of the government of Moſcow,

Contains 14 diſtricts.

1. Volodimir, or Vladimir, on the river Kliaſma.
2. Suſdal, on a rivulet falling into the Kliaſma.
3. Yurief Polſkoi, on a ſmall river falling into the Kliaſma.
4. Alexandrof, or Alexandrofſk, on the river Schernia, falling into the Kliaſma.
5. Kovrof, on the river Kliaſma.
6. Pokrof, on the ſame river.
7. Gorokhovetzk, on the ſame river.
8. Sudogda, on a river of the ſame name, falling into the Kliaſma.
9. Viaſniki, on the river Kliaſma.
10. Murom, on the Occa.
11. Pereſlavl Saleſkoi, on the rivulet Trubeſh, falling into the lake of Pereſlavl.
12. Schuia, on the river Teſs, falling into the Kliaſma.
13. Kirſhatch, on a rivulet falling into the Kliaſma.
14. Melenki, on the ſmall river Unſha, falling into the Occa.

XVIII. Government of Yaroſlaf,

Formerly a province of the government of Moſcow,

Contains 12 diſtricts.

1. Yaroſlaf, on the Volga, where the river Kotoroſl falls into it.
2. Roſtof, on the north ſide of the ſmall lake Nero, called therefore likewiſe the lake of Roſtof, communicating with the Volga by the river Kotoroſl.
3. Bariſſoglebſk, on the Volga.
4. Romanof, on the Volga, oppoſite to the laſt-mentioned town.
5. Danilof, on a rivulet falling into the Volga.
6. Liubim, on the river Negra, falling into the Kaſtroma.
7. Pocheckhon, or Pochekhonie, on the river Sagoſha, falling into the Schekſna.
8. Uglitch, on the Volga.
9. Rybnoi, on the Volga.
10. Mychkin, on the Volga.
11. Petroffk, on a ſmall river falling into the lake Nero.
12. Mologa, on the Volga.

XIX. Government of Vologda,

Formerly the largeſt of all the Ruſſian European governments, as it contained the provinces of Vologda, Archangel and Veliki-Uſtiug.

This government is divided into two provinces, Vologda and Veliki-Uſtiug.

Province

Province of Vologda,
Contains 5 diſtricts.

1. Vologda, on the river Vologda, falling into the Sukhona.
2. Griaſovetz, on a river falling into the Sukhona.
3. Kadnikof, on a river falling likewiſe into the Sukhona.
4. Totma, on the left ſide of the Sukhona.
5. Veleſk, or Velſk, on the river Vaga.

Province of Veliki-Uſtiug,
Contains 7 diſtricts.

1. Uſtiug Veliki, on the river Sukhona.
2. Nikolſk, on a rivulet falling into the Sukhona.
3. Lalſk, on the ſmall river Liala, falling into the Luſa.
4. Solvytchegodſk, or Solivytchegodſk, on the river Vytchegda.
5. Kraſnoborſk, on the left ſide of the Dvina.
6. Yarenſk, on the right ſide of the Vytchegda, where it takes in the ſmall river Yarenga.
7. Uſtſyſolk, on the river Syſſol, falling about a verſt below this town into the Vytchegda.

XX. Governent of Archangel,
Formerly included in the government of Vologda,
Contains 7 diſtricts.

1. Archangel, on the Dvina, about 70 verſts from its mouth.
2. Kholmogory, on the Dvina.
3. Schenkurſk, on the river Vaga.
4. Pineg, on the right ſide of the Dvina, where the river Pinega falls into it.

5. Onega, on the river Onega, in Ruſſian Lapland.
6. Kola, on the river Kola, near the Bay of Kola, in the Frozen Ocean.
7. Meſen, on the river Meſen, falling into the Frozen Sea.

XXI. Government of Koſtroma,

Formerly included in the government of Moſcow,

Two provinces,

A. Koſtroma, B. Unſha,

Contains 11 diſtricts.

1. Koſtroma, near the mouth of the Volga.
2. Nerechta, on a rivulet falling into the Volga.
3. Pleſs, on the Volga.
4. Kadyi, on a rivulet falling into the Volga.
5. Bui, on the river Koſtroma, where it takes in the river Vara.
6. Galitch, on the lake of that name, communicating with the river Koſtroma by the ſmall rivulet Vara.
7. Tchukhloma, near a lake of the ſame name.
8. Solgalitzk, on the Koſtroma.
9. Kinechma, on the Volga.
10. Yuricvetz Povolſkvi, on the Volga, three verſts below the mouth of the Unſha.
11. Lukh, on a river falling into the Volga.

B. Province of Unſha,

Contains 3 diſtricts.

1. Makarief, on the Unſha.
2. Varnovin, on the river Vetluga.
3. Vetluga, on the ſame river.

XXII. Government of Niſhnei Novogorod, Contains 13 diſtricts.

1. Niſhnei Novogorod, on the Volga, below the mouth of the Occa.
2. Balakhna, on the right ſide of the Volga.
3. Arſamas, on the ſmall river Teſha, falling into the Occa.
4. Makarief, on the Volga.
5. Vaſſil, on the Volga.
6. Semenof, on the rivulet Kerſhenz, falling into the Volga..
7. Ardatof, on the river Teſh, falling into the Occa.
8. Gorbatof, on the Occa.
9. Sergatch, on the river Piana, falling into the Sura.
10. Perevoſs, on the ſame river.
11. Kniaginin, on a rivulet falling into the Volga.
12. Lykaianof, on the upper part of the Teſh.
13. Potchinki, on the river Alator, falling into the Sura.

XXIII. Government of Kaſan, Conquered from the Tartars by Ivan Vaſſilievitch II. in 1552, Contains 13 diſtricts.

1. Kaſan, on the rivulet Caſanka, falling into the Volga.
2. Sviaſk, on the river Sviaga, a few verſts from its junction with the Volga.
3. Arſk, on the river Kaſanka.
4. Zyvilſk, on the river Zyvil, falling into the Volga.
5. Tſchebaxar, on the Volga, near the mouth of the rivulet Tſchebaxarka.
6. Yadrin, on the river Sura.
7. Kuſmodemianſk, on the Volga.
8. Tzarevokokchaiſk, on a rivulet Malaia Kokchaga, falling into the Volga.

9. Tetiuki, on the Volga.
10. Laikef, on the river Kama.
11. Spaſk, on the Volga.
12. Tchiſzopolſk, on the Kama.
13. Mamadyſh, on the Viatka, falling into the Kama.

XXIV. Government of Simbirſk,

Formerly a province of the kingdom of Kaſan,

Contains 13 diſtricts.

1. Simbirſk, or Sinbirſk, on the Volga.
2. Singilief, on the Volga.
3. Stavropal, on the Volga.
4. Samara, near the junction of the Volga and Samara.
5. Siſran, on the Volga, where it takes in the ſmall river Siſran.
6. Kanadei, on the river Siſran.
7. Tagai, on a rivulet falling into the Sviaga.
8. Buinſk, on the river Sviaga.
9. Karſun, on a ſmall river falling into the Sura.
10. Kotiakof, on the right ſide of the river Sura.
11. Ardatof, on the Alator.
12. Alatoc, on the Sura, where it takes in the Alator.
13. Kurmyk, on the Sura.

XXV. Government of Penza,

Formerly a province of Kaſan,

Contains 13 diſtricts.

1. Penza, on the river Sura, where it receives the rivulet Penſa.
2. Mokchainſk, weſt of Penza.
3. Inſara, on the river Inſara, falling into the Mokcha.
4. Verkhnei Lomof, on the river Lomof.

5. Niſhnie

5. Niſhnie Lomof, on the ſame river.
6. Narovtchat, on a rivulet falling into the Mokcha, which joins the Occa.
7. Troitzk, on the Mokcha.
8. Kraſnoſlobodſk, on the ſame river.
9. Scheckeief, on a rivulet falling into the Alator.
10. Saranſk, on another rivulet falling into the Alator.
11. Goroditch, on a rivulet falling into the Sura.
12. Kerenſk, on a rivulet falling into the Mokcha.
13. Tchembar, on the ſmall river Tchembar, falling into the Vorona, which flows to the Khoper.

XXVI. Government of Tanbof,

Formerly part of the government of Voronetz,

Contains 13 diſtricts.

1. Tambof, on the river Zna, which falls into the Mokcha.
2. Schatſk, on the rivulet Schat, falling into the Zna.
3. Kadom, on the river Mokcha.
4. Temnikof, on the ſame river.
5. Iclatma, on the Occa.
6. Koſlof, on the rivulet Uſnoi Voronetz.
7. Uſſman, on the ſmall river Uſſman, falling into the Voronetz.
8. Lebedian, on the Don.
9. Boriſſoglebſk, on the Khoper.
10. Morca, on the Zna.
11. Spaſk, on a rivulet falling into the Mokcha.
12. Kirſſanof, on the Vorona, falling into the Khoper.
13. Lipetzk, on the Voronetz.

XXVII. Government of Voronetz,

Contains 15 diſtricts.

1. Voronetz, on the river Voroneſh, about 14 verſts from its junction with the Don.
2. Sadonſk, on the Don.
3. Semlianſk, on a rivulet falling into the Don.
4. Niſhnedevitzk, on the rivulet Devitza, falling into the Don.
5. Korotoian, on the Don.
6. Bobrof, on the Biliuk, falling into the Don.
7. Birutch, on the river Soſna, falling into the Don.
8. Oſtrogoſchk, on a rivulet falling into the Soſna.
9. Pavloſk, on the Don.
10. Kalitva, on the rivulet Kalitva, falling into the Don.
11. Bogutchar, on a rivulet of the ſame name, falling into the Don.
12. Bielovodſk, on the river Derkul, falling into the Donek.
13. Valuiki, on the river Oſkol, where it receives the rivulet Valui.
14. Livenſk, on the rivulet Valui.
15. Kupenſk on the river Oſkol.

XXVIII. Government of Kurſk,

Formerly part of the government of Bielgorod,

Contains 13 diſtricts.

1. Kurſk, on the river Tukor, falling into the river Seim, or Sem.
2. Lgof, on the Seim.
3. Rylſk, on the ſame river.
4. Pretive, on the ſame river.
5. Fateſh, on a rivulet falling into the Svopa.

6. Tchigry,

6. Tchigry, on a rivulet falling into the Tim.
7. Tim, on the river of the ſame name, falling into the Soſna.
8. Oboian, on the river Pſol.
9. Sudſha, on a rivulet of the ſame name, falling into the Pſol.
10. Bogatoi, on the rivulet Penna, falling into the Pſol.
11. Dmitrief, on the Svopa.
12. Bielgorod, on the Donetz.
13. Korotcha, on the rivulet of that name, falling into the Donetz.
14. Novoi Oſkol, on the Oſkol.
15. Staroi Oſkol, on a river of that name.

XXIX. Government of Novogorod Severſkoi,

Part of the Ukraine, or Little Ruſſia,

Contains 11 diſtricts.

1. Novogorod Severſkoi, on the right ſhore of the Deſna.
2. Pogar, on the Sudoſh, falling into the Deſna.
3. Mglin, on a rivulet falling into the Ipul.
4. Starodub, on a rivulet falling into the Sudoſh.
5. Soſnitza, on the Deſna.
6. Korop, on the left ſhore of the ſame river.
7. Korolevetz, on a rivulet falling into the Deſna.
8. Glukhof, on the river Yeſma, falling into the Seim.
9. Konotop, on a rivulet falling into the Seim.
10. Suraſh, or Suraſhſk, on the Ipul.
11. Novomeſhſk, on the ſame river.

XXX. Government of Tchernigof,

Formerly part of the Ukraine,

Contains 11 diſtricts.

1. Tchernigof, on the right ſhore of the Deſna.
2. Bereſna, or Bereſin, on the Deſna.
3. Gorodnizk, on a rivulet falling into the Snof, which joins the Soſna.
4. Neſhin, on the Oſter, falling into the Deſna.
5. Romen, or Romna, on the river Sula.
6. Glinſk, on the ſame river.
7. Priluki, on the Udai, falling into the Sula.
8. Borſna, on a rivulet of the ſame name, falling into the Deſna.
9. Lokhvitza, on the river Sula.
10. Gaditch, on the Pſol.
11. Senkof, on a rivulet falling into the Pſol.

XXXI. Government of Kiof,

Being part of the Ukraine, or Little Ruſſia, was once a dutchy belonging to the great dukes, and Kiof, the capital, was their principal reſidence. This country was conquered by the Tartars, came again into the poſſeſſion of the great dukes, but was overran and poſſeſſed by the Coſſacs, under the protection of Poland.

In 1654, the natives, diſcontented with John Caſimir, king of Poland, ſubmitted to Ruſſia,

Ruſſia, and have ever ſince continued ſubject to that empire. The vaſt privileges enjoyed by the natives have been gradually aboliſhed, and they are now reduced to the ſame ſtate as the other provinces of the Ruſſian empire.

Contains 11 diſtricts.

1. Kioſ, on the Dnieper.
2. Oſter, on the Deſna.
3. Koſelatz, on the Oſter.
4. Piriatin, on the Udai.
5. Periaſlaf, on the Trubeſh, falling into the Dnieper.
6. Solotonok, on a rivulet of the ſame name, falling into the Dnieper.
7. Lubny, on the river Sula.
8. Khorol, on the river of the ſame name, falling into the Pſol.
9. Mirgorod, on the ſame river.
10. Goltva, on the Pſol.
11. Goroditche, on the Dnieper.

XXXII. Government of Kharkof,

Formerly compriſed in the government of Ukrania Slovodſkaia,

Contains 15 diſtricts.

1. Kharkof, on the Uda, falling into the Donetz.
2. Tchuguief, on the Donetz.
3. Iſium, on the ſame river.
4. Woltchanſk, on a rivulet falling into the Donetz.
5. Solatchef, on the Uda.
6. Walki, on a rivulet falling into the Donetz.
7. Begodukhof,

7. Bogodukhof, on the Merlo, falling into the Vorſkla.
8. Kraſnokutſk, on the ſame river.
9. Akhtyrka, on the rivulet Akhtyrka, falling into the left ſhore of the Worſkla.
10. Khotmyſk, on the Vorſkla.
11. Lebedin, on a rivulet Oltchanka, falling into the Pſol.
12. Sumy, on the right ſhore of the Pſol.
13. Miropolie, on the ſame river.
14. Nedrigailof, on the river Sula.
15. Bielopolie, on a rivulet falling into the Seim.

XXXIII. Government of Catherinenſlaf, or Ecaterrinenſlaf.

This government contains the greateſt part of that territory which was wreſted by the preſent empreſs from the Turks, and compriſes New Ruſſia, the former government of Azof, and Crim Tartary.

It is divided into the two provinces of Catherinenſlaf and Taurida.

Province of Catherinenſlaf, Contains 14 diſtricts.

1. Catharinenſlaf, on the Dnieper.
2. Poltava, on the Vorſkla.
3. Krementchuk, on the Dnieper.
4. Eliſabethgral, on the Ingul, falling into the Bug.
5. Alexandria, on the Inguletz, falling into the Dnieper.
6. Kherſon, on the Dnieper, about 14 verſts below the mouth of the Inguletz.
7. Stavenſk, on the Dnieper.
8. Novomoſkorſk, on the Dnieper.

9. Pavlograd,

9. Pavlograd, on a river falling into the Dnieper.
10. Mariupal, on a river near the ſea of Aſof.
11. Bakhmuh, on the river of that name, falling into the Donetz.
12. Donetzk, on the river Donetz.
13. Conſtantinograd, on the Orel, falling into the Dnieper.
14. Alexopolſk, on the ſame river.

Province of Taurida, or Crim Tartary.

This fertile peninſula, the great mart of commerce in the Black Sea, was colonized for the purpoſes of trade by the Greeks, Romans, Genoeſe, occupied by the Turks under Mahomet the Second, and governed by the Khan of the Tartars, a vaſſal to the Porte. On the peace of Kainardi, in 1774, it was declared an independent ſovereignty, taken poſſeſſion of by Catharine II. on the abdication of the Khan Sahim Gerai, in 1783, and confirmed to Ruſſia by the Porte in the ſame year by the treaty of Conſtantinople. The empreſs has revived ſeveral of the ancient Greek names.

Contains 7 diſtricts.

1. Levkopol, formerly Akmephiel.
2. Synpheropol, formerly Eſki Krim, i. e. Old Crimea.
3. Eupatoria, formerly Koſlof, or Goſleve.
4. Perekop.
5. Phanagoria,

5. Phanagoria, on the iſland of Taman.
6. Dneproviſk, on the Dnieper.
7. Melotopol, on the river Melotchnie.

XXXIV. Government of Caucaſus,

Divided into two provinces, Aſtracan and Caucaſus, but not yet ſubdivided into diſtricts.

Aſtracan was conquered from the Tartars, in 1552, by Ivan Vaſſilievitch.

Province of Caucaſus,

Will compriſe the Cuban, and all that diſtrict to the eaſt and ſouth, now in the poſſeſſion of Ruſſia, between the rivers Don and Cuban, and between the Caſpian and the Euxine, extending as far as the confines of Georgia, and continually augmenting by the reduction and ſubmiſſion of the wandering hordes of Mount Caucaſus.

XXXV. Government of Saratof,

Formerly a province of Aſtracan,
Contains 11 diſtricts.

1. Saratof, on the Volga.
2. Volſk, on the ſame river.
3. Khvalynſk, on the ſame river.

4. Kuſnetzk,

4. Kuſnetzk, on a rivulet falling into the Sura.
5. Serdobſk, on the river Serdoba, falling into the Khoper.
6. Petroffk, on the Medveditza.
7. Atkar, or Atkarſk, on the river Atkara, falling into the Medreditza.
8. Balakef, on the river Khoper.
9. Khoperſk, formerly Novokhoperſk, on the ſame river.
10. Kamychin, called formerly Dmitreffk, on the right ſide of the Volga.
11. Tzaritzyn, on the Volga.

XXXVI. Government of Ufa,

Formerly included in the government of Orenburgh, is divided into two provinces, Ufa and Orenburgh.

Province of Ufa,
Contains 9 diſtricts.

1. Ufa, on the right ſide of the Bielaia, a few verſts beneath the mouth of the river Ufa.
2. Birſk, on the river Bielaia.
3. Menſclinſk, on the river Menſel, falling into the Ik.
4. Bugulm, or Bugulminſk, on the Bugulm, a rivulet falling into the Ik.
5. Bogoroſtan, on a river falling into the Samara.
6. Belebeief, on a rivulet falling into the Diema, which flows into the Bielaia.
7. Sterlitamak, on the ſmall river Sterlia, falling into the Bielaia.
8. Ichalyabinſk, on the river Mijap.
9. Troitzk, on the river Ui.

cluded before the death of Feodor Ivanovitch, in 1598.

It is divided into the two provinces of Tobolſk and Tomſk.

Province of Tobolſk,
Contains 10 diſtricts.

1. Tobolſk, on the Irtyſh, oppoſite to the mouth of the Tobol.
2. Tiumen, on the Tura.
3. Turinſk, on the Tura.
4. Berefof on the Soſſva, falling into the Ob.
5. Surgut, on the Oby.
6. Tara, on the Irtyſh.
7. Yalutoroffk, on the Tobol.
8. Kurgan, on the river Kurgan.
9. Ichimſk, on the river Ichim.
10. Omſk, on the Irtyſh, near the mouth of the Om.

Province of Tomſk,
Contains 6 diſtricts.

1. Tomſk, on the river Tom.
2. Kainſk, on the river Om.
3. Narym, on the Oby, below the mouth of the Ket.
4. Mangaſeia, or Turukhanſk, on the Yeniſei.
5. Yeniſeiſk, on the river Yeniſei.
6. Atchinſk, on the river Tchulym, falling into the Ob.

XL. Government of Kolyvan,

Formerly included in the government of Tobolſk,

Contains 5 diſtricts.

1. Kolyvan, the new capital of this government, on the Oby,

Oby, near the mouth of the Berda, known before the inſtitution of this government under the name of *Berdſkoi Oſtrog*.

2. Semipalat, on the Irtyſh.
3. Biiſk, on the river Bi, or Biia, which, by uniting with the Katunia, forms the river Oby.
4. Kuſnezk, on the river Tom, oppoſite to the mouth of the Kondoma.
5. Kraſſnoiarſk, on the Yeniſei, where it receives the Katcha.

XLI. Government of Irkutzk,

The largeſt and leaſt peopled government in Ruſſia, compriſes all the eaſtern part of Siberia, from the Northern Ocean to the frontiers of Chineſe Tartary, and from the boundaries of the government of Tobolſk to the Eaſtern Ocean. This large territory was gradually conquered and appropriated by the Ruſſians in their deſultory excurſions from Tobolſk.

It is divided into the four provinces of Irkutzk, Nertſhiuſk, Yakutſk, and Okotzk.

Province of Irkutzk,
Contains 4 diſtricts.

1. Irkutzk, on the Angara, oppoſite to the mouth of the river Irkut.
2. Kirenſk, on the Lena, above the mouth of the Kirenga.

3. Niſhnie-Udinſk, on the river Uda, falling into the Upper Tunguſka.
4. Verkhnei-Vedinſk, on the river Vecla, falling into the Selenga.

Province of Nertchinſk,
Contains 4 diſtricts.

1. Nertchinſk, on the Nertcha, falling into the Schilka.
2. Doroninſk, on the Ingoda.
3. Barguſinſk, on the river Barguſin, falling into the lake Baikal.
4. Stretinſk, on the Schilka.

Province of Yakutſk,
Contains 5 diſtricts.

1. Yakutſk, on the Lena.
2. Olekminſk, on the Lena, ſeveral verſts above the mouth of the Olekma.
3. Olenſk, a town to be erected on the river Olenek.
4. Schiganſk, on the Lena, about 800 verſts from Yakuzk.
5. Sachiverſk, on the Indigirka.

Province of Okotzk,
Contains 4 diſtricts.

1. Okotzk, on the mouth of the Okota, falling into a bay of the Eaſtern Ocean.
2. Ichiginſk, on the mouth of the river Ichigina, falling into the bay of Penſhina.
3. Aklanſk, on the ſmall river Aklan, falling into the river Penſhina.
4. Niſhnie-Kamtchatka, on the river Kamtchatka, about 30 verſts from its mouth.

APPENDIX.

N° II.

List of the Books consulted or referred to in this additional Volume.

BACKHO's Handbuch der Geschichte und Erdbeschreibung Preussens, 8vo.

Dunamund and Leipzig, 1784.

Bemouli's Reisen durch Brandenburg, Pommern, Preussen, Curland, Russland, und Poln, in 1777 and 1778, 3 vol. in 12mo. Leipzig, 1779.

Fabricius Reise in Norwegen, small 8vo.

Gadbluſch Livl Caendische Jarbuecher, in 8vo. several volumes. Riga, 1780.

Hansen's Staats-beschreibung des Hertzogthums Schleswig, 8vo. Flamburgh, 1770.

Hupel's Topographische Nachrichten von Lief und Esthland, 3 vol. 8vo. Riga, 1774, 1782.

Pontoppidan's Natural Hiſtory of Norway, folio.

Schmidt's Materialien der Ruſſiſche Geſchichte, Part ii.

Wilſe's Reiſe Beobachtungen auf einigen Reiſen in Dannemarck und Norwegen, in Bernoullis' Collection, 7, 8, and 10. Band.

Ziegenhorn's Staats-Recht der Hertzogthuemer Curland und Semigallen, in folio. Konigſberg, 1772.

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